

QUARTERLY
ECONOMIC
COMMENTARY

Winter 2009

ALAN BARRETT
IDE KEARNEY
JEAN GOGGIN
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ESRI

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**ALAN BARRETT
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*The forecasts in this Commentary are based
on data available by mid December 2009*

RESEARCH BULLETIN

09/4

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Alan Barrett, Ide Kearney, Jean Goggin and Thomas Conefrey

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SUMMARY TABLE

	2007	2008	2009(f) ¹	2010(f)
OUTPUT				
(Real Annual Growth %)				
Private Consumer Expenditure	5.9	-1.0	-7	-1
Public Net Current Expenditure	6.9	2.6	-1 ½	-3
Investment	2.1	-15.5	-30 ¼	-17 ½
Exports	8.6	-1.0	-2 ¾	1 ½
Imports	5.6	-2.1	-9 ½	-2 ½
Gross Domestic Product (GDP)	6.0	-3.0	-7 ¼	- ¼
Gross National Product (GNP)	4.4	-2.8	-10	-1 ½
GNP per capita (constant prices)	2.0	-4.6	-10 ¾	-1 ½
PRICES				
(Annual Growth %)				
Harmonised Index of Consumer Prices (HICP)	2.8	3.3	-1 ¾	-1
Consumer Price Index (CPI)	4.9	4.1	-4 ½	- ½
Wage Growth	3.5	3.5	-1	-2 ½
LABOUR MARKET				
Employment Levels (ILO basis (000s))	2,123	2,100	1,930	1,854
Unemployment Levels (ILO basis (000s))	101	141	258	298
Unemployment Rate (as % of Labour Force)	4.6	6.3	11 ¾	13 ¾
PUBLIC FINANCE				
Exchequer Balance (€m)	-1,619	-12,714	-25,261	-18,161
General Government Balance (€m)	346	-13,037	-19,260	-18,560
General Government Balance (% of GDP)	0.2	-7.2	-11 ¾	-11 ½
General Government Debt (% of GDP)	25.1	44.2	65 ¼	78
EXTERNAL TRADE				
Balance of Payments Current Account (€m)	-10,128	-9,439	-3,277	787
Current Account (% of GNP)	-6.3	-6.1	-2 ½	½
EXCHANGE AND INTEREST RATES				
US\$/€ Exchange Rate (annual average)	1.39	1.47	1.40	1.49
STG£/€ Exchange Rate (annual average)	0.69	0.79	0.89	0.90
Main ECB Interest Rate (end of year)	4.00	2.50	1.00	1.75

¹ In the tables and text we present percentages (rates of change or percentage shares) of historical data to one decimal point. For our forecasts such percentages are presented as fractions rounded-off to the nearest quarter. This is to emphasise the distinction between historical data and forecast numbers.

SUMMARY

It is hard to overstate what a difficult year 2009 has been for the Irish economy. We now expect that the economy will contract by 10 per cent on a GNP basis this year, or $7\frac{1}{4}$ per cent in GDP terms. This follows a contraction of around 3 per cent in 2008, in both GNP and GDP terms. While these are stark figures, the true impact of the recession is probably better illuminated through the figures on employment and unemployment. We now expect that the average number employed will be 170,000 lower in 2009 relative to 2008. Comparing 2007 and 2009, that figure is likely to be 193,000. At the end of 2007, the rate of unemployment was just 4.6 per cent; at the end of 2009, it is 12.5 per cent.

We expect to see a further contraction in the economy in 2010 but this contraction will be modest compared with 2009. We expect GNP to fall by $1\frac{1}{2}$ per cent in volume terms; for GDP, the corresponding decline is $\frac{1}{4}$ per cent. This annual figure is based on output continuing to fall at the start of the year followed by a resumption of growth in the second half.

Given positive developments in the international environment, exports are expected to grow next year at a rate of $1\frac{1}{2}$ per cent. However, domestic factors will act as a drag on growth. Private consumption is expected to fall by 1 per cent, investment by $17\frac{1}{2}$ per cent and public consumption by 3 per cent. It should be noted that although consumption is expected to fall, our forecasts include a modest reduction in the savings rate between 2009 and 2010, from $11\frac{1}{2}$ per cent to $10\frac{3}{4}$ per cent. This fall is included in the expectation that Budget 2010 will have boosted confidence, as will a slower pace of employment loss in 2010 relative to 2009.

On employment, we expect a fall of 170,000 in 2009 and of 76,000 in 2010. Unemployment is forecast to average $11\frac{3}{4}$ per cent this year and to peak at close to 14 per cent in the latter part of 2010. We expect net outward migration to be 40,000 in the year ending April 2010.

On the public finances, we expect the general government deficit to be $11\frac{3}{4}$ per cent of GDP in 2009 and $11\frac{1}{2}$ in 2010. The general government debt is forecast to reach 78 per cent of GDP by the end of 2010. This figure does not include any net liabilities under NAMA as such liabilities will not be treated as part of the general government debt.

We expect that CPI inflation will average $-4\frac{1}{2}$ per cent this year and $-\frac{1}{2}$ per cent in 2010. The corresponding forecasts for HICP inflation are $-1\frac{3}{4}$ and -1.

In our *General Assessment*, we discuss how Budget 2010 can be judged positively in terms of macro-fiscal management, even if some micro-dimensions are open to question. One such example is the exclusion of all pensions from cuts regardless of the wealth and incomes of those concerned. In spite of popular perceptions, analysis contained in the *Commentary* shows that Budget 2010 was not the most contractionary of modern times, largely due to the deflationary context in which the measures were enacted. A further piece of analysis shows that while Budget 2010 was clearly regressive, the combination of Budgets 2009 and 2010 placed most of the burden of fiscal adjustment on higher earners.

NATIONAL ACCOUNTS 2008 (Estimate)

A: Expenditure on Gross National Product

	2007 €m	2008 Estimate €m	Change in 2008				
			€m		%		
			Value	Volume	Value	Price	Volume
Private Consumer Expenditure	91,948	93,863	1,915	-893	2.1	3.1	-1.0
Public Net Current Expenditure	27,275	28,901	1,626	716	6.0	3.3	2.6
Gross Fixed Capital Formation	49,429	39,474	-9,955	-7,663	-20.1	-5.5	-15.5
Exports of Goods and Services (X)	153,481	151,896	-1,585	-1,606	-1.0	0.0	-1.0
Physical Changes in Stocks	-146	317	464	447			
Final Demand	321,986	314,451	-7,535	-8,998	-2.3	0.5	-2.8
less:							
Imports of Goods and Services (M)	134,112	133,002	-1,110	-2,846	-0.8	1.3	-2.1
less:							
Statistical Discrepancy	-1,876	-365	1,511	-392			
GDP at Market Prices	189,751	181,815	-7,936	-5,760	-4.2	-1.2	-3.0
less:							
Net Factor Payments (F)	-28,507	-27,218	1,289	1,276	-4.5	0.0	-4.5
GNP at Market Prices	161,244	154,596	-6,648	-4,484	-4.1	-1.4	-2.8

B: Gross National Product by Origin

	2007 €m	2008 Estimate €m	Change in 2008	
			€m	%
Agriculture, Forestry, Fishing	3,249	2,890	-359	-11.0
Non-Agricultural: Wages, etc.	77,328	78,929	1,601	2.1
Other:	70,587	63,088	-7,499	-10.6
Adjustments: Stock Appreciation	-648	-186		
Statistical Discrepancy	-1,876	-365		
Net Domestic Product	148,641	144,357	-4,283	-2.9
less:				
Net Factor Payments	-28,507	-27,218	1,289	-4.5
National Income	120,133	117,139	-2,994	-2.5
Depreciation	17,849	17,443	-405	-2.3
GNP at Factor Cost	137,982	134,582	-3,400	-2.5
Taxes less Subsidies	23,262	20,014	-3,248	-14.0
GNP at Market Prices	161,244	154,596	-6,648	-4.1

C: Balance of Payments on Current Account

	2007 €m	2008 Estimate €m	Change in 2008	
			€m	%
Exports (X) less Imports (M)	19,369	18,894	-475	
Net Factor Payments (F)	-28,507	-27,218	1,289	
Net Transfers	-990	-1,115	-125	
Balance on Current Account	-10,128	-9,439	689	
as % of GNP	-6.3	-6.1	0.2	

D: GNDI and Terms of Trade

	2006 €m	2007 Estimate €m	2007 Volume Change	
			€m	%
Terms of Trade Loss or Gain		-1,961		
GNP Adjusted for Terms of Trade	161,244	154,799	-6,445	-4.0
GNDI*	160,254	153,699	-6,556	-4.1
National Resources**	160,293	153,767	-6,527	-4.1

*GNDI is GDP adjusted for terms of trade and net international transfers.

** GNDI including capital transfers.

FORECAST NATIONAL ACCOUNTS 2009

A: Expenditure on Gross National Product

	2008 Estimate €m	2009 Forecast €m	Change in 2009				
			€m		%		
			Value	Volume	Value	Price	Volume
Private Consumer Expenditure	93,863	84,674	-9,189	-6,570	-9 ¾	-3	-7
Public Net Current Expenditure	28,901	26,401	-2,500	-434	-8 ¾	-7 ¼	-1 ½
Gross Fixed Capital Formation	39,474	25,525	-13,949	-11,970	-35 ¼	-7 ¼	-30 ¼
Exports of Goods and Services (X)	151,896	150,143	-1,753	-4,050	-1 ¼	1 ½	-2 ¾
Physical Changes in Stocks	317	-1,732	-2,049	-2,344			
Final Demand	314,451	285,011	-29,441	-25,852	-9 ¼	-1 ¼	-8 ¼
less:							
Imports of Goods and Services (M)	133,002	121,933	-11,068	-12,650	-8 ¼	1 ¼	-9 ½
less:							
Statistical Discrepancy	-365	-365	0	-112			
GDP at Market Prices	181,815	163,442	-18,372	-13,090	-10	-3 ¼	-7 ¼
less:							
Net Factor Payments (F)	-27,218	-30,324	-3,105	-2,511	11 ½	2	9 ¼
GNP at Market Prices	154,596	133,119	-21,478	-15,541	-14	-4 ¼	-10

B: Gross National Product by Origin

	2008 Estimate €m	2009 Forecast €m	Change in 2009	
			€m	%
Agriculture, Forestry, Fishing	2,890	2,168	-723	-25
Non-Agricultural: Wages, etc.	78,929	72,118	-6,811	-8 ¾
Other:	63,088	58,072	-5,017	-8
Adjustments: Stock Appreciation	-186	-200		
Statistical Discrepancy	-365	-365		
Net Domestic Product	144,357	131,793	-12,565	-8 ¾
less:				
Net Factor Payments	-27,218	-30,324	-3,105	11 ½
National Income	117,139	101,469	-15,670	-13 ½
Depreciation	17,443	15,981	-1,463	-8 ½
GNP at Factor Cost	134,582	117,449	-17,133	-12 ¾
Taxes less Subsidies	20,014	15,669	-4,345	-21 ¾
GNP at Market Prices	154,596	133,119	-21,478	-14

C: Balance of Payments on Current Account

	2008 Estimate €m	2009 Forecast €m	Change in 2009	
			€m	%
Exports (X) less Imports (M)	18,894	28,210	9,315	
Net Factor Payments (F)	-27,218	-30,324	-3,105	
Net Transfers	-1,115	-1,163	-48	
Balance on Current Account	-9,439	-3,277	6,162	
as % of GNP	-6.1	-2 ½	3 ¾	

D: GNDI and Terms of Trade

	2008 €m	2009 Estimate €m	2009 Volume Change	
			€m	%
Terms of Trade Loss or Gain		349		
GNP Adjusted for Terms of Trade	154,596	139,405	-15,192	-9 ¾
GNDI*	153,481	138,257	-15,225	-10
National Resources**	153,549	138,557	-14,993	-9 ¾

*GNDI is GDP adjusted for terms of trade and net international transfers.

** GNDI including capital transfers.

FORECAST NATIONAL ACCOUNTS 2010

A: Expenditure on Gross National Product

	2009 Estimate €m	2010 Forecast €m	Change in 2010				
			€m		%		
			Value	Volume	Value	Price	Volume
Private Consumer Expenditure	84,674	83,408	-1,266	-847	-1 ½	- ½	-1
Public Net Current Expenditure	26,401	23,275	-3,126	-792	-11 ¾	-9	-3
Gross Fixed Capital Formation	25,525	19,890	-5,635	-4,442	-22	-5 ¾	-17 ½
Exports of Goods and Services (X)	150,143	153,837	3,694	2,292	2 ½	1	1 ½
Physical Changes in Stocks	-1,732	-96	1,636	1,170			
Final Demand	285,011	280,314	-4,696	-3,159	-1 ¾	- ½	-1
less:	0	0	0	0			
Imports of Goods and Services (M)	121,933	119,977	-1,957	-2,962	-1 ½	¾	-2 ½
less:							
Statistical Discrepancy	-365	-365	0	89			
GDP at Market Prices	163,442	160,703	-2,740	-286	-1 ¾	-1 ½	- ¼
less:							
Net Factor Payments (F)	-30,324	-31,911	-1,587	-1,748	5 ¼	- ½	5 ¾
GNP at Market Prices	133,119	128,792	-4,327	-1,900	-3 ¼	-1 ¾	-1 ½

B: Gross National Product by Origin

	2009 Estimate €m	2010 Forecast €m	Change in 2010	
			€m	%
Agriculture, Forestry, Fishing	2,168	2,168	0	0
Non-Agricultural: Wages, etc.	72,118	67,693	-4,425	-6 ¼
Other:	58,072	60,031	1,960	3 ¼
Adjustments: Stock Appreciation	-200	-200		
Statistical Discrepancy	-365	-365		
Net Domestic Product	131,793	129,327	-2,465	-1 ¾
less:				
Net Factor Payments	-30,324	-31,911	-1,587	5 ¼
National Income	101,469	97,416	-4,052	-4
Depreciation	15,981	15,792	-188	-1 ¼
GNP at Factor Cost	117,449	113,209	-4,241	-3 ½
Taxes less Subsidies	15,669	15,583	-86	- ½
GNP at Market Prices	133,119	128,792	-4,327	-3 ¼

C: Balance of Payments on Current Account

	2009 Estimate €m	2010 Forecast €m	Change in 2010	
			€m	%
Exports (X) less Imports (M)	28,210	33,861	5,651	
Net Factor Payments (F)	-30,324	-31,911	-1,587	
Net Transfers	-1,163	-1,163	0	
Balance on Current Account	-3,277	787	4,064	
as % of GNP	-2 ½	½	3	

D: GNDI and Terms of Trade

	2009 €m	2010 Estimate €m	2010 Volume Change	
			€m	%
Terms of Trade Loss or Gain		114		
GNP Adjusted for Terms of Trade	133,119	131,332	-1,786	-1 ¼
GNDI*	131,956	130,179	-1,776	-1 ¼
National Resources**	132,024	130,479	-1,544	-1 ¼

*GNDI is GDP adjusted for terms of trade and net international transfers.

** GNDI including capital transfers

THE INTERNATIONAL ECONOMY

Main Developments

The economic trauma which hit the world's economies in the latter part of 2008 and early 2009 is reflected in the growth figures shown in Table 1. According to the OECD, the Euro Area will contract by 4 per cent in 2009. The contraction in both Germany and Italy is expected to be close to 5 per cent, with France faring somewhat better and contracting by a more modest 2.3 per cent. The UK is expected to experience a GDP fall of 4.7 per cent in 2009 while the corresponding figure for the US is 2.5 per cent.

While the global downturn has been severe, the data for the third quarter of 2009 provide a basis for cautious optimism. The Euro Area grew by 0.4 per cent in Q3², thereby signalling the end of recession for the region as a whole. As discussed in the last *Commentary*, France and Germany had already recorded a return to growth in Q2 and this was maintained in Q3. France grew by 0.3 per cent in Q3 while Germany grew by 0.7 per cent. Italy also recorded growth in Q3, of 0.6 per cent, but Spain remained in recession, with GDP falling by 0.3 per cent.

The US had still been in recession in Q2 of this year but it too had returned to growth by Q3, with growth of 0.7 per cent. By contrast, the UK remained in recession in Q3, with GDP falling by 0.3 per cent. For Japan, the timing of recovery was similar to that of Germany, with growth being recorded in Q2 and then accelerating in Q3 when growth of 1.2 per cent was recorded.

The severe contractions across the major economies are reflected in the other indicators in Table 1. Inflation across the globe in 2009 has been either low or negative. The UK is expected to have the highest rate, at just over 2 per cent. The figure for the UK is partly related to sterling weakness and we return to this issue below. For the Euro Area, inflation is expected to be 0.2 per cent in 2009; in the US, inflation is expected to be negative this year, at -0.4 per cent.

The trends in unemployment across 2008 and 2009 are as expected, given economic developments, with the exception of Germany. Although German GDP is expected to fall by almost 5 per cent in 2009, the increase in the rate of unemployment in 2009 is modest, rising to just 7.6 per cent from 7.2 per cent in 2008. Part of this can be explained by the employment subsidy which the German government has provided in an effort to reduce

² All growth figures quoted in this paragraph are quarter on quarter and seasonally adjusted.

redundancies. The number of workers on this scheme approached 1.5 million in the summer.

Trends in General Government Balances partly reflect the deterioration in economic conditions but also the stimulus packages that many governments have implemented. While all countries have seen significant deteriorations in their public finances, the US and the UK stand out with both likely to post deficits of well over 10 per cent of GDP in 2009.

The existence of high levels of public deficits is among a number of factors that are leading international forecasters to remain cautious on the prospects for economic growth in 2010 and beyond. The build-up in public debt means that governments will have to begin the process of rolling back on stimulatory fiscal policies. While all major economies are expected to maintain the patterns of growth which are emerging in 2009, the pace of growth in 2010 is generally expected to be modest. For the Euro Area, GDP is forecast to grow by just 0.9 per cent in 2010, with both Germany and France expected to grow by 1.4 per cent. Real GDP growth in the UK is expected to be 1.2 per cent next year. The expectations for the US are stronger, as reflected in the growth forecast of 2.5 per cent.

Other factors which are likely to act as a drag on growth in 2010 are the possible tightening in monetary policy and on-going caution on the part of consumers. As we have discussed in previous *Commentaries*, official interest rates are at historic lows in the major economies, having been reduced aggressively in the latter part of 2008 and the early part of 2009. In addition to low interest rates, many central banks have been injecting huge amounts of liquidity into the markets through purchases, for example, of covered bonds in the case of the European Central Bank (ECB). As discussed in Euroframe (2009),³ the assets of the ECB jumped by about 25 per cent in the last quarter of 2008, with a doubling of assets in the case of the US Federal Reserve. Were such policies to remain in place for too long, a danger arises of inflationary pressures building and of inflationary expectations becoming elevated. For this reason, interest rate increases and a withdrawal of liquidity-related measures will occur in the near future although the precise timing, and the speed of adjustment, remains uncertain.⁴

Implications for Ireland

EXPORTS

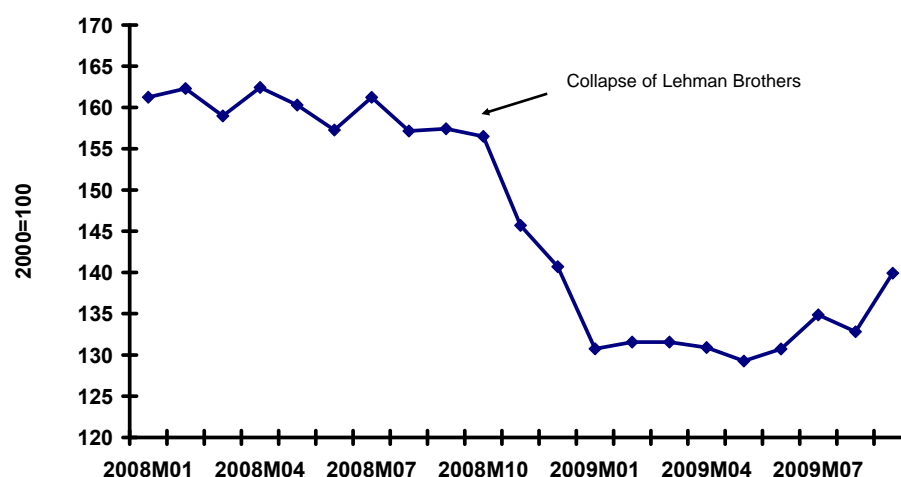
In Figure 1, we show the trend in world merchandise trade from the beginning of 2008 through to September 2009. The collapse in world trade volumes between the latter part of 2008 and the early part of 2009 is very evident. We can also see the subsequent stabilisation in volumes and then the upturn in the most recent months. This recovery should be positive from an Irish perspective, especially when combined with the favourable outlook for GDP growth in 2010, relative to 2009, across the major economies.

³ Euroframe (2009), *Economic Assessment of the Euro Area*, available at www.euroframe.org

⁴ We discuss in the section below on monetary indicators how conditions in inter-bank lending markets have returned to normality following the near-chaos of early 2009. This return to normality is another factor leading central banks to unwind their liquidity-related policy interventions.

One of the surprising features of the Irish economy during much of 2009 was the relative resilience of exports when compared to the dramatic falls being experienced elsewhere. While the third quarter of 2009 showed some slippage,⁵ the broad picture which emerged over the year was that of an export base which was somewhat insulated from the recession, due in large part to the concentration of pharmaceutical products within those exports. As exports did not plummet during the worst of the contraction, they are unlikely to show as dramatic a bounce back as might be expected in other countries. Nevertheless, the more favourable economic climate of 2010 should be positive for Irish exports, and as long as the trend in competitiveness is reversed.

Figure 1: Index of World Trade, January 2008 – September 2009



Source: World Trade Monitor, CPB (The Netherlands).

INTEREST RATES

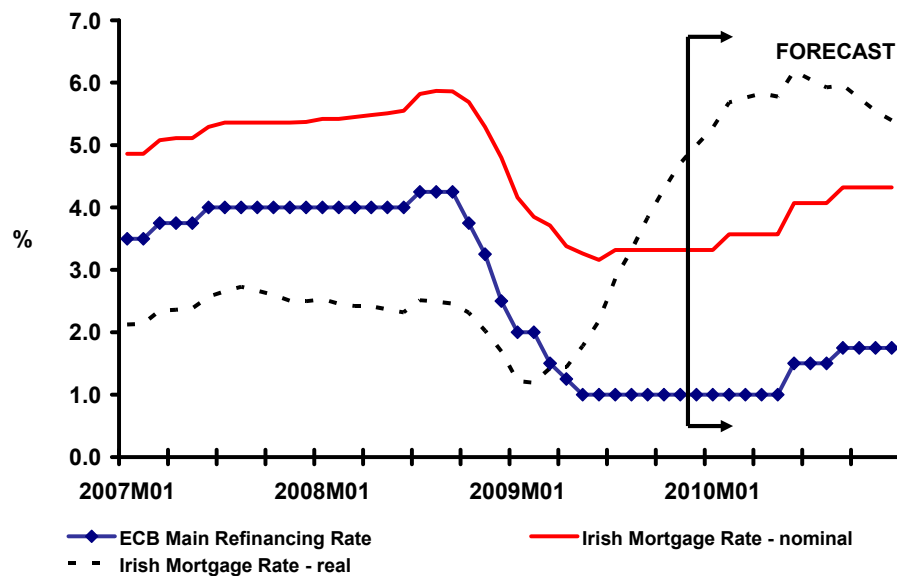
As noted above, interest rates were cut to historically low levels during the course of 2009 and there is now a collective sense that there is no further scope for interest rate reductions, with upwards movements now in prospect. However, the precise timing and speed of those movements remain an open question. Managing the conflicting goals of ensuring that the recovery is sustainable and yet avoiding the build-up of inflationary pressures will be the key task facing monetary authorities in many jurisdictions in 2010, including the ECB.

Within the Euro Area, inflation is expected to remain subdued during the course of 2010 – the OECD forecasts a HICP of just 0.9 per cent in 2010. Such low inflation will result in part from excess productive capacity in the wake of the downturn and also from subdued wage pressures as a result of unemployment. Given this low inflationary environment and ongoing concerns about the sustainability of the recovery, we see it as being unlikely that the ECB would raise interest rates during the first half of 2010. However, thereafter we envisage rates rising to 1.75 per cent by the end of 2010, as shown in Figure 2, with further rises beyond that almost

⁵ The volume of goods exports fell by 6 per cent between July and August 2009.

inevitable⁶. We have expressed a concern in previous *Commentaries* about the possibility of interest rate rises occurring when the recovery in the Euro Area generally has taken root but when recovery in Ireland is still fragile. This remains a big concern as any steep interest rises will impact upon consumer confidence and the cost of credit.⁷

Figure 2: Interest Rates



Source: CSO, ECB and own forecasts.

EXCHANGE RATES

As shown in Figure 3, the Euro is currently strong relative to Sterling and this is a major concern for Ireland's competitiveness. Having been in a range of .75 to .80 for most of last year, the rate peaked at over .97 in the last week of 2008. Since then, the Euro has eased somewhat, trading below .90 for most of the summer months. However, in September the rate broke .90 again and is currently hovering around .90 with negative implications for UK-oriented exporters, many of whom are indigenous enterprises.

Much of the weakness of sterling is related to the general state of the economy, the very loose nature of monetary policy and the large fiscal deficit. As discussed above, the UK was unlike most major economies in failing to emerge from recession in the third quarter. It is forecast to have the largest public deficit of the major economies in 2010. With a general election certain to happen in 2010, the markets may believe that little will happen by way of fiscal correction in the early part of 2010, a view that was essentially confirmed by the UK Pre-Budget Report.

Given the on-going depressed state of the UK economy and the difficulties with its public finances, it is likely that sterling will remain weak well into 2010. For this reason, we base our forecasts on the assumption that the $STG_{\pounds}/\text{€}$ exchange rate will average .9 next year.

⁶ As with all ESRI *Commentaries* projected values for interest rates and exchange rates should be viewed more as technical assumptions as opposed to forecasts.

⁷ The rapid rise in the real mortgage rate shown in Figure 2 is related to the falling rate of inflation throughout the year.

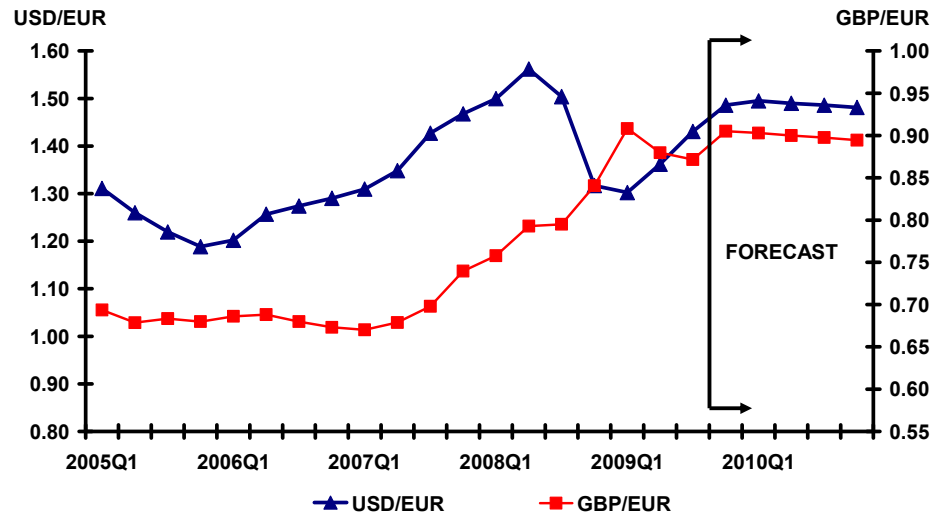
Table 1: Short term International Outlook

Country	GDP Output Growth			Consumer Price Inflation*			Unemployment Rate			General Government Balance % of GDP		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
UK	0.6	-4.7	1.2	3.6	2.1	1.7	5.7	8.0	9.3	-5.3	-12.6	-13.3
Germany	1.0	-4.9	1.4	2.8	0.2	1.0	7.2	7.6	9.2	0.0	-3.2	-5.3
France	0.3	-2.3	1.4	3.2	0.1	1.0	7.4	9.1	9.9	-3.4	-8.2	-8.6
Italy	-1.0	-4.8	1.1	3.5	0.7	0.9	6.8	7.6	8.5	-2.7	-5.5	-5.4
Euro Area	0.5	-4.0	0.9	3.3	0.2	0.9	7.5	9.4	10.6	-2.0	-6.1	-6.7
USA	0.4	-2.5	2.5	3.8	-0.4	1.7	5.8	9.2	9.9	-6.5	-11.2	-10.7
Japan	-0.7	-5.3	1.8	1.4	-1.2	-0.9	4.0	5.2	5.6	-2.7	-7.4	-8.2
China	9.0	8.5	9.0	5.9	-0.1	0.6	9.8	7.8	8.6			
OECD	0.6	-3.5	1.9	0.0	0.0	0.0	5.9	8.2	9.0	-3.5	-8.2	-8.3
Ireland	-3.0	-7 ¼	- ¼	3.3	-1 ¾	-1	6.3	11 ¾	13 ¾	-7.2	-11 ¾	-11 ½

Source: OECD Economic Outlook 86 and own forecasts for Ireland HICP for Euro Area countries and the UK.

Since February and March of this year, the Euro has generally been strengthening relative to the US dollar. At that time, the Euro was worth around US\$1.26 but since then the Euro has broken through the US\$1.50 mark (October 23/26). With the Euro Area having emerged from recession before the US, this real-economy factor has contributed to the strengthening of the Euro. In addition, this sequencing of the ends of recessions has led to an expectation of interest rate rises happening in the Euro Area before the US. This too has contributed to Euro strengthening. Our forecasts are based on the expectation that the US\$/Euro Rate will average 1.49 next year.

Figure 3: Exchange Rates



Sources: CBFSAI (historic) and Euroframe Winter Report 2009 (forecast).

THE DOMESTIC ECONOMY

The forecasts contained in this *QEC* are more positive about 2010 than those in the previous *Commentary*. This broadly reflects the more favourable international economic backdrop discussed in the *International* section. We expect GDP to contract by 7 ¼ per cent in 2009, with GNP contracting by 10 per cent. For 2010, we expect the pace of contraction to ease considerably with GDP expected to fall by ¼ per cent and GNP expected to fall by 1½ per cent.

The most recent *Quarterly National Accounts* suggest that the economy has stabilised, with quarter-on-quarter GDP up 0.4 per cent (seasonally adjusted). However, this is driven by a very large fall in imports (4.5 per cent quarter-on-quarter) rather than a nascent recovery in other categories of expenditure. In particular, exports faltered in the third quarter having recorded positive growth in Q2. Furthermore, the very large fall in factor income flows in the recent quarter has widened the wedge between GDP and GNP, the latter recorded a quarter-on-quarter fall of 1.4 per cent. Table 2 shows what growth would be across the main expenditure headings given the trends up to Q3 2009 and on the assumption of no change for the remainder of the calendar year 2009, i.e., the implied carryover. Looking firstly at private consumption, the implied carryover is -7.3 per cent for 2009. Our forecast for 2009 is very similar, at -7 per cent. This means that we expect a modest increase in private consumption spending in the final quarter of 2009. However, we do expect a further fall in consumption in 2010, in response to the contractionary budget. For

Table 2: Implied Carryover (% change)

	2008	Carryover 2009	QEC Forecast 2009	QEC Forecast 2010
Private Consumer Expenditure	-0.9	-7.3	-7	-1
Public Net Current Expenditure	2.6	-1.0	-1½	-3
Private Investment	-15.6	-29.6	-30¼	-17.½
Exports	-1.0	-2.4	-2.¾	1.½
Imports	-2.0	-9.3	-9½	-2½
Gross Domestic Product (GDP)	-3.0	-68	-7¼	-¼
Gross National Product (GNP)	-2.8	-11.2	-10	-1½

both public consumption and investment, our forecasts incorporate expected on-going falls in volumes through the remainder of 2009 and into 2010. In contrast, we expect exports to pick up during 2010, based on the improved prospects for the world economy. Imports are expected to decline in the remainder of 2009 before rising slightly in the second half of 2010.

While our forecasts for GNP and GDP are broadly in line with our most recent *Commentaries*, we are less pessimistic with regard to employment. We now expect the rate of unemployment to peak at almost 14 per cent in 2010. This is a significant downward revision from our initial estimate in Spring 2009 of an unemployment rate of 16¾ per cent. This revision is partly driven by the stabilisation since then of the public finances, with an emphasis on pay and price cuts in budgetary measures adopted since then rather than employment cuts. But it is also due to the much more rapid fall in labour force participation throughout 2009 than we had anticipated.

Our forecasts are based on the assumption that Budget 2010 is implemented in full. We expect the General Government Deficit in 2010 to remain essentially unchanged in, at 11½ per cent.

Consumption

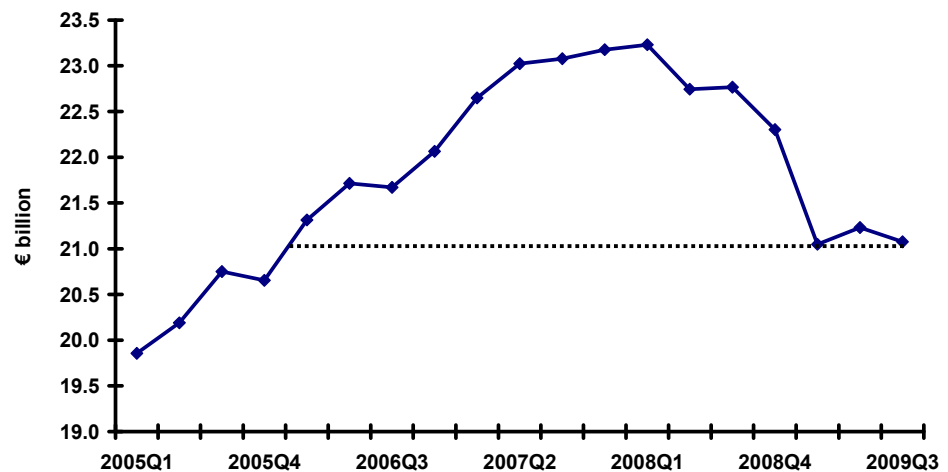
The volume of consumer expenditure has declined substantially since the beginning of last year, reflecting the difficult labour market conditions and an increase in precautionary saving by consumers. The most recent *Quarterly National Accounts* indicate that in the year ending September 2009 the volume of private consumption fell by almost 7 per cent. This sharp decline is evident in the annualised figures across all the major indicators of consumption, as shown in Table 3. Based on data up to the end of September, retail sales have fallen by 17 per cent, with sales of vehicles particularly affected. In addition, the November Exchequer Returns show that revenue from consumption taxes⁸ was down by over 20 per cent in the January-November 2009 period, compared to the same period in 2008. The sharp decline since early 2008 has brought consumption back to a level last seen at the beginning of 2006, as shown in Figure 4.

Table 3: Recent Indicators of Consumption (Annualised Growth Rates)

	Retail Sales (Unadjusted)		Trips Abroad	New Vehicle Sales	All Vehicle Sales
	All Businesses	Excluding Motor Trade			
2008Q1	5.8	7.0	11.6	-1.5	-2.6
2008Q2	2.4	5.5	8.3	-10.3	-13.7
2008Q3	-0.6	3.3	6.2	-12.8	-18.0
2008Q4	-4.4	-0.7	2.1	-15.4	-20.9
2009Q1	-11.1	-4.5	-3.1	-31.9	-44.7
2009Q2	-14.5	-7.6	-5.0	-37.3	-62.2
2009Q3	-17.0	-9.9		-46.1	-59.7

⁸ Customs, Excise and VAT receipts.

Figure 4: Personal Expenditure on Consumer Goods and Services, Constant Prices (Seasonally Adjusted)



Source: Quarterly National Accounts, CSO.

The quarter-on-quarter figures point to some signs of recent stabilisation. Seasonally adjusted consumption grew by 0.9 per cent in Q2, relative to Q1 as shown in Figure 4 above. It fell again in Q3, but by just 0.7 per cent – a considerably slower pace of contraction compared to the first quarter of the year. Retail sales have also picked up, following a very sharp decline in the early part of this year. The index for all retail businesses registered quarter-on-quarter growth of 3.5 per cent in Q3, on a seasonally adjusted basis. The latest information from the KBC Ireland/ESRI Consumer Sentiment Index suggests that consumer confidence, while still fragile, is improving. In October the index reached its highest level since early 2008, and while it dropped slightly in November, it remains significantly higher than the all-time low of July 2008.

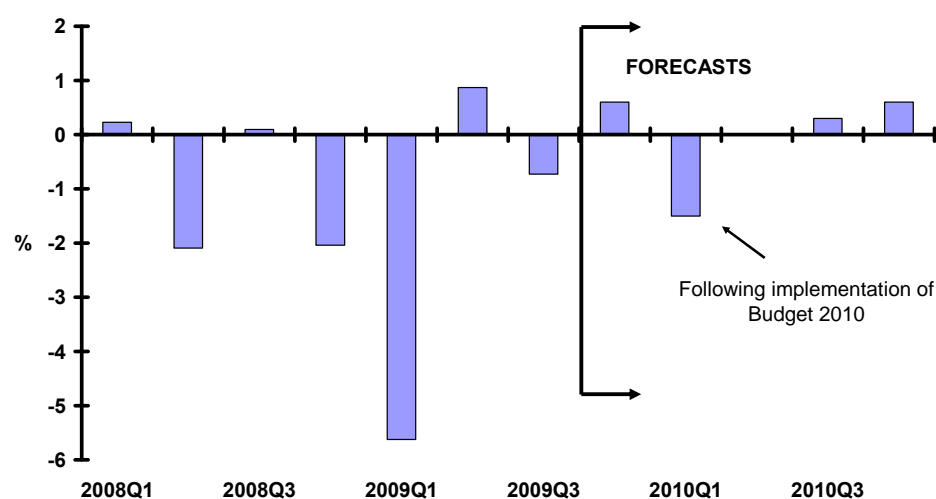
Turning to our forecasts, we do not expect any further deterioration in consumption for the remainder of 2009, based on the indications of recent stabilisation. Given the very sharp decline in the earlier part of the year, this implies an annual fall of 7 per cent in 2009. For 2010, we have revised our forecast upward since our *Autumn Commentary*. At that time we expected an annual decline of 2 per cent in 2010 – we are now forecasting a smaller contraction of 1 per cent. We expect consumption to fall again in the early part of the year, in response to the full implementation of Budget 2010.⁹ However, our upward revision to the annual forecast for 2010 is partly due to the composition of the Budget. The fiscal adjustment is based almost entirely on public expenditure, with only small changes made to taxation.¹⁰ In addition, while the cuts to public sector pay and social welfare will affect personal disposable income levels, and hence consumption, the Budget

⁹ Bergin, A., T. Conefrey, J. Fitz Gerald and I. Kearney, 2009. “The Behaviour of the Irish Economy: Insights from the *HERMES* Macroeconomic Model,” ESRI Working Paper No. 287. This paper demonstrates the impact of various changes to fiscal policy on the key macroeconomic aggregates.

¹⁰ In our previous *Commentary*, we implemented a budgetary package for 2010 according to the details provided in the April Supplementary Budget. These included tax increases of €1.75 billion. The changes to taxation announced in Budget 2010 are expected to yield just €126 million in a full year. For full details see www.budget.gov.ie

does not imply significant employment losses in the public sector. As discussed in the *Employment* section below, we have revised our forecast for the unemployment rate in 2010 downward and this will have a positive impact on consumer spending. Furthermore, we expect that the implementation of the pre-announced €4 billion savings package will give some boost to consumer confidence. As discussed in previous *Commentaries*, our forecasts for 2009 include an increase in the savings rate, reflecting the response of consumers to on-going uncertainties in relation to issues such as employment and taxation. We assume that the Budget removes an element of that uncertainty for consumers and, as a result, we expect to see some reduction in the savings rate in 2010. We will return to this point in the section on *Incomes*.

Figure 5: Quarter-on-Quarter Consumption Growth, Constant Prices (Seasonally Adjusted)



Source: Quarterly National Accounts, CSO and own forecasts.

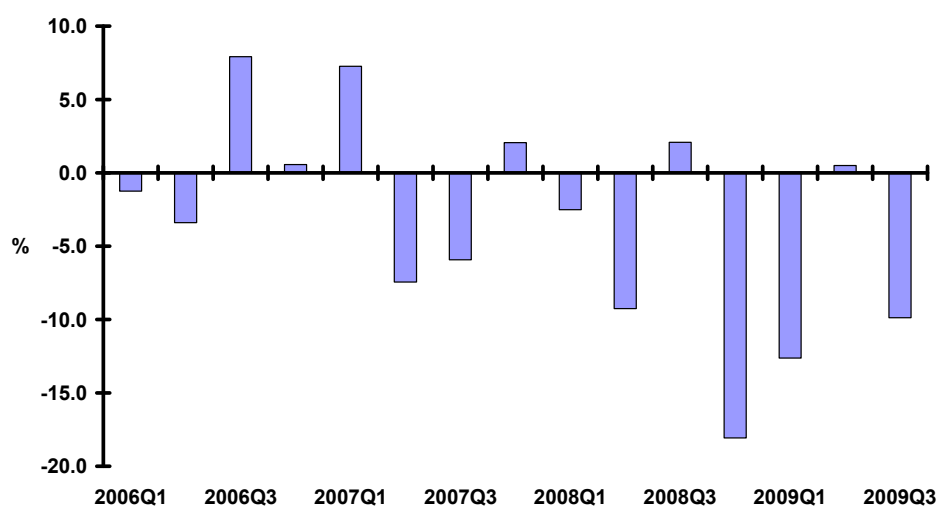
Investment

In the last *Commentary*, we noted how the changing pattern of investment between Q1 and Q2 of 2009 was something of a puzzle. According to the Quarterly National Accounts (QNA) for Q2 2009 investment had fallen by over 10 per cent in Q1 (on a quarter-on-quarter basis, seasonally adjusted) but had then risen by over 5 per cent in Q2. The latest *Quarterly National Accounts* show that investment fell by 9.9 per cent in Q3, as reflected in Figure 6. They also show a revision to the Q1 and Q2 figures, which are now estimated to be -12.6 per cent and +0.5 per cent respectively.

Table 4: Gross Fixed Capital Formation

	2007	% Change in 2008		2008	% Change in 2009		2009	% Change in 2010		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Housing	21,542	-26.3	-29.8	15,123	-40	-44 ½	8,391	-29 ¾	-37 ¼	5,272
Other Building	13,351	8.6	-1.2	13,193	-20	-28	9,499	-15	-21	7,509
Transfer Costs	3,373	-42.6	-50.2	1,681	-60	-70	504	-15	-20	403
Building and Construction	38,266	-15.5	-21.6	29,997	-32 ¼	-38 ¾	18,394	-21 ½	-28 ¼	13,184
Machinery and Equipment	11,163	-15.4	-15.1	9,477	-24	-24 ¾	7,130	-5	-6	6,706
Total	49,429	-15.5	-20.1	39,474	-30 ¼	-35 ¼	25,525	-17 ½	-22	19,890

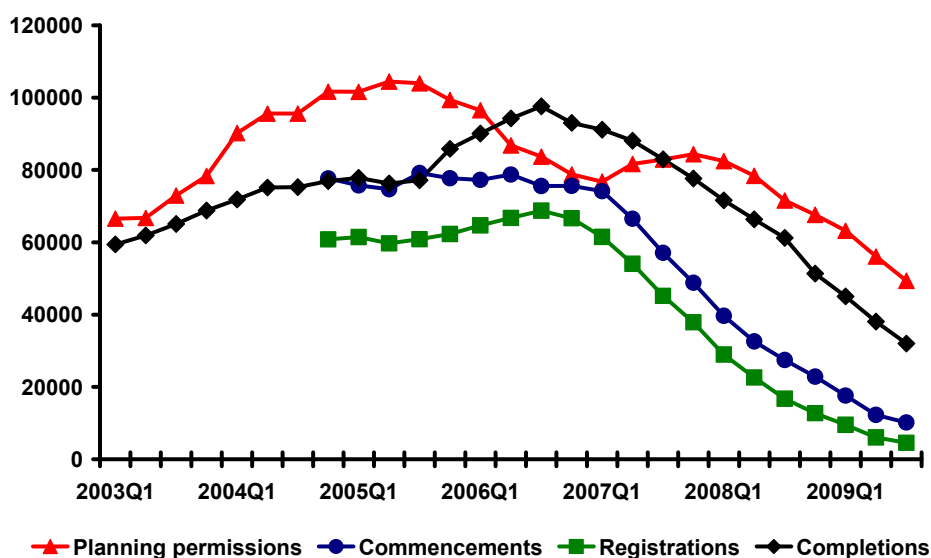
Figure 6: Quarter-on-Quarter Growth in Investment, Constant Prices, Seasonally Adjusted



Source: Quarterly National Accounts, CSO.

In Figure 7, we show the latest trends in house building. The overall picture is now familiar with house completions continuing to decline, along with the other indicators of activity in the sector. In the year ending Q3 2009, almost 32,000 housing units were completed, a reduction of close on 50 per cent relative to the year ended Q3 2008. We now expect to see 24,000 house completions for the calendar year 2009. Looking into 2010, we expect the downward trend in completions to continue based on the leading indicators shown in Figure 7. Our forecast is for 10,000 completions in 2010. These completion figures imply falls in housing output of 40 per cent in 2009 and of 29¾ per cent in 2010. With house prices continuing to fall, the reductions in value terms are steeper.

Figure 7: Housing Statistics, Annualised Numbers



Source: CSO and Department of the Environment, Heritage and Local Government.

According to the ESRI/PTSB house price index, house prices continue to fall and at a pace similar to earlier months. The October index showed a

national fall of 1.8 per cent in the month, which compares to falls of 1.1 per cent, 1.5 per cent and 1.1 per cent in September, August and July respectively. House prices in October were 12.7 per cent lower than at the start of the year and are now 26.6 per cent below their peak values of February 2007.¹¹ As in our previous *Commentary*, we expect price falls to continue through 2010 and for the cumulative fall in the price of new houses relative to the peak in 2007 to amount to 40 per cent.

In addition to the on-going falls in housing, building and construction activity is also declining, and will continue to decline, because of falls in commercial and retail building and in public investment. As discussed in the section on the public finances, a proportion of the adjustment in spending both in 2009 and in 2010 is being borne by the public capital programme. However, with tender prices falling, the impact on the volume of output will be lower than the impact on values. For 2009, we now expect “other building” to contract by 20 per cent in volume terms and by 28 per cent in value terms. The corresponding figures for 2010 are -15 per cent (volume) and -21 per cent (value).

Given the broad economic conditions in 2009, it is no surprise that investment in machinery and equipment has fallen. Year-on-year to Q3 2009, it is estimated by the CSO that this component of investment fell by 25 per cent. For the year 2009, we now expect that the decline will be 24 per cent. With conditions remaining subdued in 2010, it is likely that investment will also remain subdued and so we are forecasting a contraction of 5 per cent in the volume of investment in machinery and equipment next year.

In total, we expect that investment will fall by 30¼ per cent in 2009 and by a further 17½ per cent in 2010.

Government Spending and Public Finances

Budget 2010 has introduced a series of expenditure cuts equivalent to €4 billion, or 2.4 per cent of GDP. This follows a series of measures begun in the middle of 2008 which are cumulatively equivalent to over €9 billion or 5.5 per cent of GDP. While the measures introduced in the course of 2009 included large increases in taxation with limited reductions in expenditure, *Budget 2010* is concentrated on cuts in expenditure, in particular current expenditure cuts of €3 billion.

¹¹ It should be noted that the ESRI/PTSB house price index lags the market by a number of months due to the method of data collection.

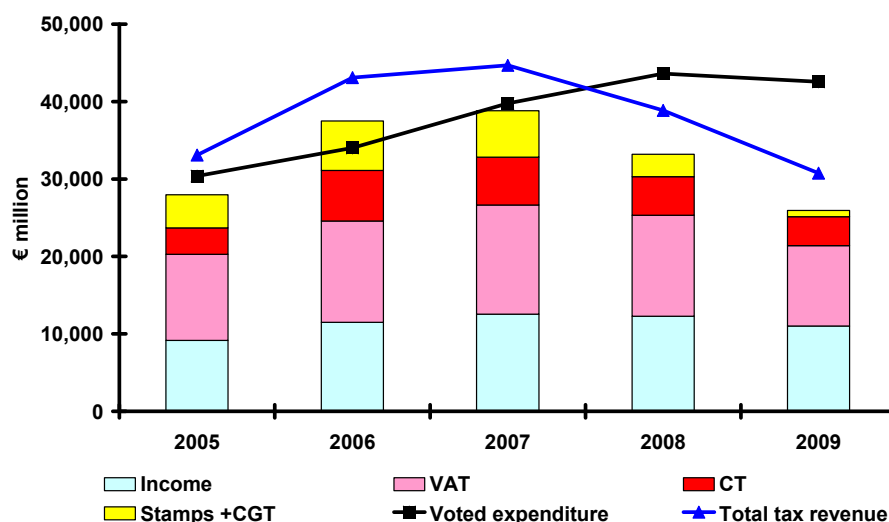
Table 5: Public Finances

	2007 €m	% Change	2008 €m	% Change	2009 €m	% Change	2010 €m
Current Revenue	47,887	-13.1	41,624	-19 ¾	33,404	3 ¼	34,024
Current Expenditure	40,896	9.3	44,692	1 ¾	45,520	3 ½	47,123
<i>of which: Voted</i>	36,959	10.3	40,757	-1	40,368	- ½	40,191
Current Surplus	6,991		-3,068		-12,116		-13,099
Capital Receipts	1,408	-0.8	1,398	4 ¾	1,464	14 ¼	1,672
Capital Expenditure	10,019	10.2	11,043	32 ¼	14,609	-54	6,734
<i>of which: Voted</i>	7,650	11.8	8,556	-20 ¾	6,773	-12 ¾	5,909
Capital Borrowing	-8,610		-9,645		-13,145		-5,062
Exchequer Balance	-1,619.2		-12,713.5		-25,261.0		-18,161
as % of GNP	-1.0		-8.2		-19		-14
General Government Balance*	345.8		-13,037.0		-19,260.0		-18,560.3
as % of GDP	0.2		-7.2		-11 ¾		-11 ½
Gross Debt as % of GDP	25.1		44.2		65 ¼		78
Net Debt as % of GDP**	12.2		22.6		41		53 ¼

* 2008 - 2010 numbers are based on National Accounts estimates.

**Net of NPRF, Social Insurance and Exchequer Balances.

Figure 8: November Exchequer Returns



Source: Department of Finance.

The end-November exchequer returns showed total tax revenue in the first eleven months of 2009 was just under €31 billion, down almost €14 billion from the same period in 2007. Taxes have fallen across all categories (see Figure 8), with the largest falls in property related taxes (stamp duty, capital gains tax, capital acquisitions tax and VAT) but also significant falls in income tax receipts, the latter despite increases in income levies in the last two budgets. While to some extent the decline in income tax receipts

simply reflects the decline in employment and pay rates in the economy, the performance of this category is below our forecasts. This is arguably due to a decline in annual earnings in the economy, as reflected in recent declines in average hours worked. The scale of the collapse in tax revenues is shown in Table 6. This compares revenues in 2007 with 2009 across the broad categories. Total exchequer tax revenue is down by €15 billion or almost one-third in two years.

Table 6: Tax Revenues

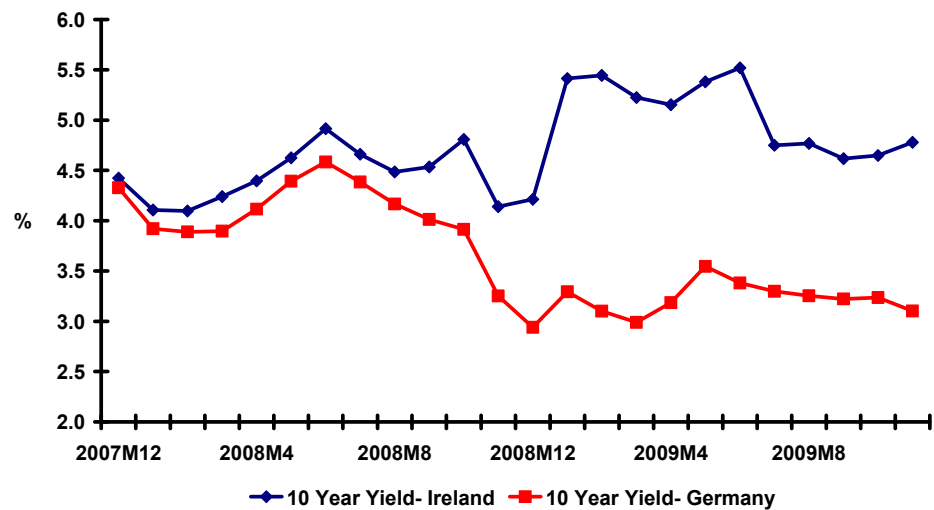
	2007	2008	2009 ¹²	Change since 2007	
	€m	€m	€m	€m	%
Excise	5,838	5,443	4,575	-1,263	-22
Stamps	3,186	1,651	900	-2,286	-72
Capital Gains Tax	3,105	1,430	385	-2,720	-88
Capital Acquisitions Tax	392	332	260	-132	-34
Corporation Tax	6,391	5,066	3,790	-2,601	-41
VAT	14,497	13,430	10,640	-3,857	-27
Income Tax (including levy)	13,572	13,177	11,810	-1,762	-13
Total Tax Revenue	47,249	40,777	32,570	-14,679	-31

The latest official estimates suggest that the General Government Balance will be just above €19 billion in 2009, equivalent to 11 ³/₄ per cent of GDP. In this *Commentary* we have implemented the €4 billion expenditure cuts announced in the Budget, €3 billion on current expenditure and €1 billion on capital expenditure. Using the official forecasts for expenditure and non-tax revenues from Budget 2010, and our own tax forecasts, we forecast that this will remain broadly unchanged in 2010, at €18.6 billion. On this basis, and excluding the funding costs associated with NAMA in 2010, this will imply that the gross debt as a percentage of GDP will be 78 per cent at the end of 2010, up from 25 per cent in 2006. However, a significant part of this debt is held in Government funds by the NTMA, both in the National Pension Reserve Fund and in exchequer cash balances. This means that the net debt in 2010 will be significantly lower, at 53¹/₄ per cent of GDP.¹³ Relative to 2007, this is an increase of almost €63 billion in net indebtedness, 40 percentage points of GDP, and reflects the speed with which the public finances have unravelled.

¹² Dept. of Finance full-year estimates in *Budget 2010* book.

¹³ These figures do not include the planned government borrowings for NAMA of €54 billion.

Figure 9: Irish Government Bond Yields and German Equivalents



With the recent turbulence on markets in relation to Greece’s funding position, it is important to keep track of the current and future costs of funding Irish government debt. The deterioration in the government’s fiscal position, the increase in its contingent liabilities arising from the introduction of the bank guarantee scheme, and the subsequent supports for the banking system (Table 7) led to a significant widening in Irish government bond yields over their German equivalents from late 2008, as shown in Figure 9. The differential on 10 year government bonds widened from 30 basis points in August 2008 to 230 in February 2009 due to the increased perceived risk of Irish bonds as well as increased risk aversion on the part of investors. The Irish bond spread vis-à-vis Germany tightened significantly between April and October 2009 in the wake of government actions aimed at stabilising the deficit and amid signs that the pace of economic contraction was easing. Nonetheless, Irish yield spreads remain among the highest in the Euro Area reflecting ongoing concern regarding the sustainability of the public finances.

Table 7: Overview of Existing and Announced Government Support to the Banks

	€ billion
2009 - Total Recapitalisation end November 2009:	
Allied Irish Bank	3.5
Anglo Irish Bank	4.0
Bank of Ireland	3.5
2010 - Payment Planned for Loans under NAMA	54.0

Box 1: Measuring Fiscal Stance

Measures of fiscal stance attempt to capture in a single indicator the combined macroeconomic effects of all the various decisions taken in a budget in respect of public expenditure and taxation. The macroeconomic impact of a government's budget is typically judged on whether the fiscal stance is considered to be expansionary or contractionary in terms of either boosting or dampening aggregate demand in the domestic economy. There is, however, no universally accepted indicator or methodology for assessing fiscal stance.

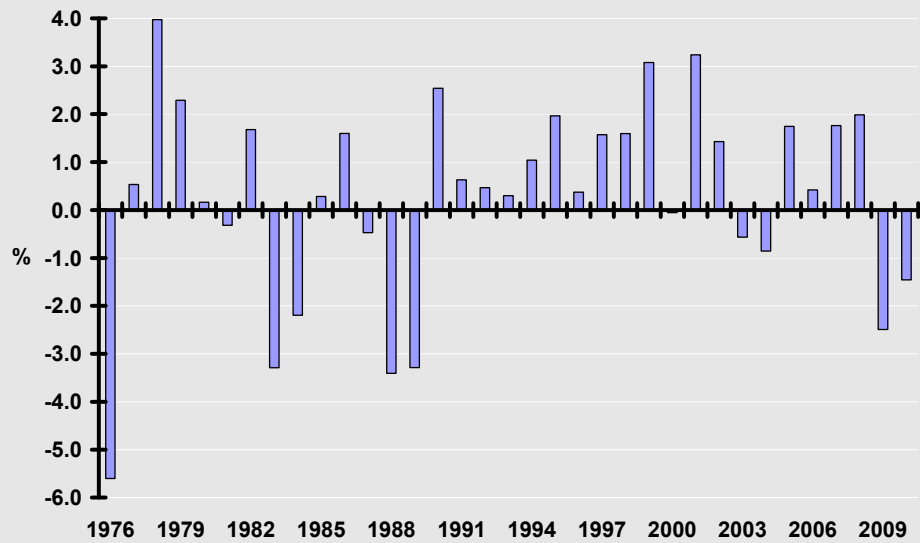
The current methodology used by the European Commission in assessing the stance of fiscal policy involves estimating the structural budget balance in each year based on an estimate of the potential output of the economy in each year. However, there are a number of difficulties in interpreting the structural budget balance as an indicator of fiscal stance. There are methodological difficulties surrounding the definition and measurement of capacity output. Blanchard (1990)¹⁴ has argued that the choice of a benchmark for the economy is “needlessly controversial” in measuring fiscal stance. The definition of capacity output involves making implicit assumptions about the future course of the economy that are unnecessary if we are interested in assessing fiscal stance. Such difficulties can be avoided by basing the measure of fiscal stance on the change in discretionary policy relative to the previous year's budget. In this box we present such an indexed budget measure using the ESRI *HERMES* macroeconomic model.

Figure A shows our estimates of the overall measure of fiscal stance based on the difference between an indexed and actual General Government Deficit¹⁵. A positive result implies an expansionary Budget, a negative sign indicates a contractionary Budget. Scanning across the graph we can see that the most contractionary Budget since 1976 was introduced in that year. But this measure also suggests that the Budgets of 1983, 1988 and 1989 were all more contractionary than either the 2009 or proposed 2010 Budget. This seems to contradict popular perceptions that these two recent budgets are the most contractionary in the history of the state. The reason for this is relatively straightforward: while the nominal cuts introduced in the 2009 and 2010 Budgets may well be unprecedented, in real terms their effect is much more muted since prices and wages are also falling in the economy. By contrast in the 1980s, relatively high rates of inflation meant that a nominal freeze in pay rates or welfare payments translated into a more severe real reduction.

¹⁴ Blanchard, O.J., 1990. “Suggestions for a New Set of Fiscal Indicators”, *OECD Working Paper*, No.79.

¹⁵ For further details see Kearney *et al.* (2001), “Assessing the Stance of Irish Fiscal Policy”, in *Budget Perspectives Proceedings of a Conference Held on 19 September 2000*. Dublin: Economic and Social Research Institute, September.

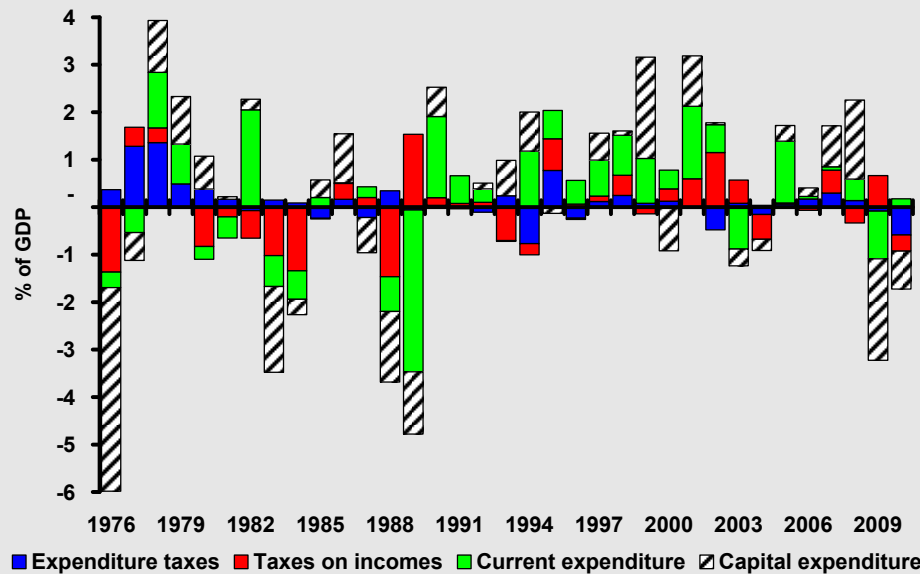
Figure A: Incremental Measure of Fiscal Stance (% of GNP)



Source: Own Estimates.

Figure B breaks down the composition of this fiscal stance measure among the main categories of expenditure. Scanning across the graph it is clear that capital expenditure has been the most discretionary element of short-term budgetary policy. In particular it explains the very severe contraction implied by the 1976 budget, when capital expenditure cuts of over 4 percentage points of GDP were implemented. In relation to the 2010 Budget, the breakdown seems counter-intuitive; it suggests that discretionary changes in current expenditure have had an expansionary effect on the overall fiscal stance. This reflects the difficulty of implementing an indexed Budget at a time of deflation, in particular in relation to pension payments. With nominal pension payments unchanged, forecasts of falls in prices and wage levels in 2010 mean that this measure forms a real stimulus to the economy.

Figure B: Composition of Fiscal Stance



Source: Own Estimates.

Figure C gives an overview of the cumulative effect of these budgetary changes across distinct time periods. The periods chosen are based on four phases of distinct shifts in Irish fiscal policy identified by Honohan (1999) as

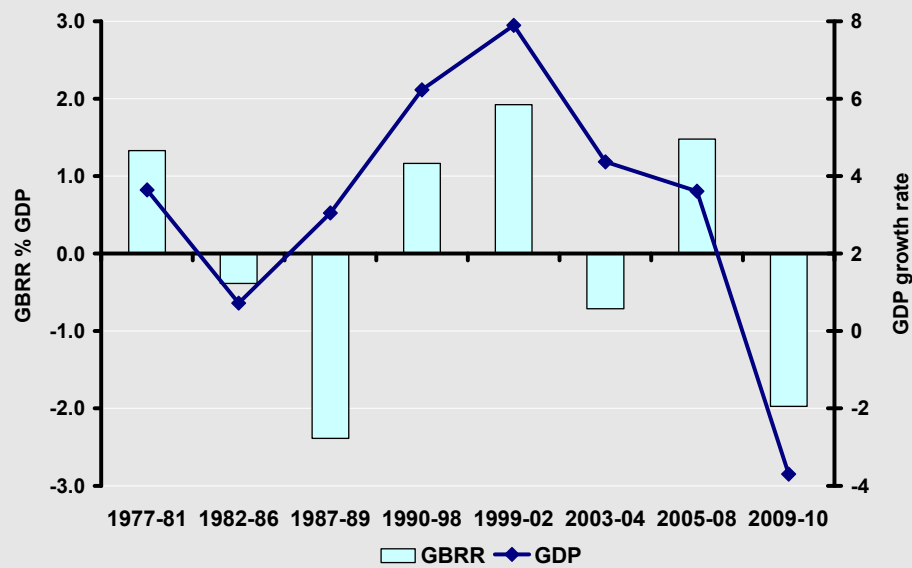
1977-1981	Unsustainable Expansion
1982-1986	Good Intentions
1987-1989	Decisive Action
1990- present	A New Equilibrium

We have split the post 1989 period into a further four sub-periods,

1990-98	“New Equilibrium”
1999-2002	Growth
2003-2004	Dotcom slowdown
2005-2008	Bubble
2009-2010	Retrenchment

Figure C shows that between 1999 and 2002 there was a cumulative giveaway equivalent to far more than the “spendthrift years” of the late 1970s. It also suggests that the current period of retrenchment is less severe in impact than in the period 1987-1989.¹⁶ The graph also includes the annual average growth in GDP. This clearly suggests that, with the exception of the 1987-1989 and 2003-2004 periods, fiscal policy has for the past thirty years been decidedly pro-cyclical.

Figure C: Measure of Fiscal Stance and GDP Growth Rate, Annual Averages



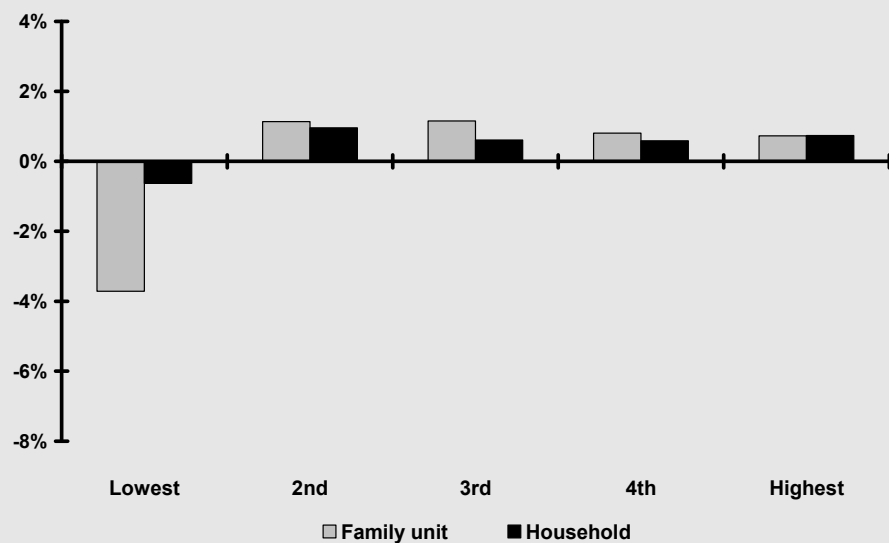
Source: Own Estimates.

¹⁶ However, this is not a fully valid comparison since 2011 is also expected to include a contractionary budget which is not included here.

Box 2: Distributional Impact of Tax and Welfare Policy Changes
 by T. Callan, C. Keane and J.R. Walsh

We have argued consistently that the distributional impact of tax and welfare changes must be assessed against a benchmark which is “distributionally neutral”.¹⁷ The conventional opening budget measures changes against a scenario in which tax and welfare parameters are frozen in nominal terms. This is not a neutral benchmark: in periods of growth it would mean that welfare recipients would not share in growth, while in current circumstances, with wages (and prices) falling, the relative incomes of welfare recipients would increase if welfare rates remained the same while other incomes fell. A budget indexed to changes in wages has been shown to approximate a neutral benchmark, against which policy changes can be measured, and we continue to use this consistent framework in assessing the impact of policy changes. We look first at the impact of Budget 2010, and then at the cumulative impact of the Budgets for 2009 and Budget 2010. The analysis includes the impact of the public service pension levy, but does not, at this stage, include the recently announced public sector pay cuts.¹⁸ Each of these would involve further substantial variation in impacts within income groups. Here we concentrate on average effects across income groups.

Figure A: Distributional Impact of Budget 2010 versus Wage Indexation (-2.5%)



Note: Family units or households are divided into 5 equal sized groups, ranked by from lowest to highest incomes (adjusted for family/household size and composition)

Figure 1 shows the distributional impact of Budget 2010, measured against a benchmark which indexes of tax and welfare parameters with respect to the 2.5 per cent fall in wages forecast in this *Commentary*. Analysis at family unit level (which groups children of school age or below along with third level students living in the parental home) finds that there is a decline of over 4 per cent for the lowest income quintile. Much of this effect is driven by the very sharp reductions in Job Seeker’s Allowance for

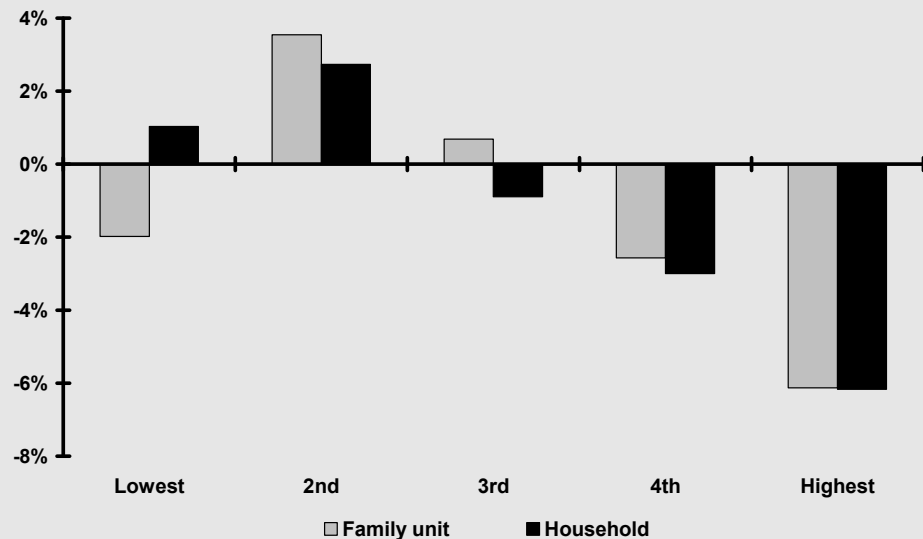
¹⁷ T. Callan, M. Keeney and J.R. Walsh “Income Tax and Welfare Policies: Some Current Issues” in T. Callan and D. McCoy (eds.) *Budget Perspectives 2002*.

¹⁸ Analysis of the distributional impact of public sector pay cuts is now under way.

those aged under 25. The full rate of payment is €196, but this is reduced by close to 25 per cent for those aged between 22 and 24, and by almost half for those aged 20 or 21¹⁹. Many of the young people on Job Seeker's Allowance are living in the parental home, and their entitlements were already subject to a reduction depending on familial means. Young adults, whether at work or claiming welfare, count as separate family units within the larger household.

Official targets for reductions in the numbers in poverty²⁰ are typically measured at household level.²¹ For this reason it is of interest to examine the distributive impact of Budget 2010 measured at household level. Here the impact on the lowest income group, relative to a wage-indexed budget, is much less severe: a fall of 1.5 per cent. For other income quintiles there are very small gains, with the gain at the top reaching 0.5 per cent. This reflects the fact that tax credits, for example, were frozen rather than being reduced in line with wages and that welfare rates for the elderly remained unchanged.

Figure B: Combined Distributional Impact of Budgets 2009 and Budget 2010 versus Wage Indexation (-3.5%)



Note: Family units or households are divided into 5 equal sized groups, ranked by from lowest to highest incomes (adjusted for family/household size and composition)

Figure 2 shows the results of a similar analysis for the consolidated Budget for 2009 and the recent Budget 2010. Taken together, these budgets can be seen as representing the consolidated policy response to the recession. Budget 2009 included a 3 per cent rise in the main welfare payment rates, and substantial increases in taxes and levies, including the public service pension levy. Once again, the impact on those at lowest incomes differs depending on the unit of analysis. The poorest family units see a drop in income of about 3 per cent, but the average income of the poorest households hardly changes. On either measure there are gains (of 2 or 3 per cent) for the next quintile, which contains many of those with

¹⁹ The payment rate for those aged 18 or 19 had already been reduced by about half in April's Supplementary Budget for 2009.

²⁰ This applies equally to both the Irish government's measure of "consistent poverty" and the EU's headline indicator of numbers "at risk of poverty".

²¹ Most academic research on poverty is also conducted at this level.

State pensions, which remained unchanged. There have been substantial falls for the top end of the income distribution (about 6 per cent for both households or family units) and for the quintile with the second highest incomes (losses of about 3 per cent). These losses arise mainly from the income taxes and levies (including the public service pension levy) imposed in April 2009's Supplementary Budget.

Thus, while Budget 2010 is clearly regressive, with, the combination of Budgets 2009 and 2010 put the greatest burden of adjustment on those with highest incomes. The position of those with the lowest incomes depends to a significant extent on whether this is measured at household level, or at the narrower family unit level. On average there is a 3 per cent reduction in the incomes of the poorest 20 per cent of family units, which includes many young unemployed people affected by the sharpest reductions in welfare payments. However, the average effect on the poorest 20 per cent of households is slight.

Exports

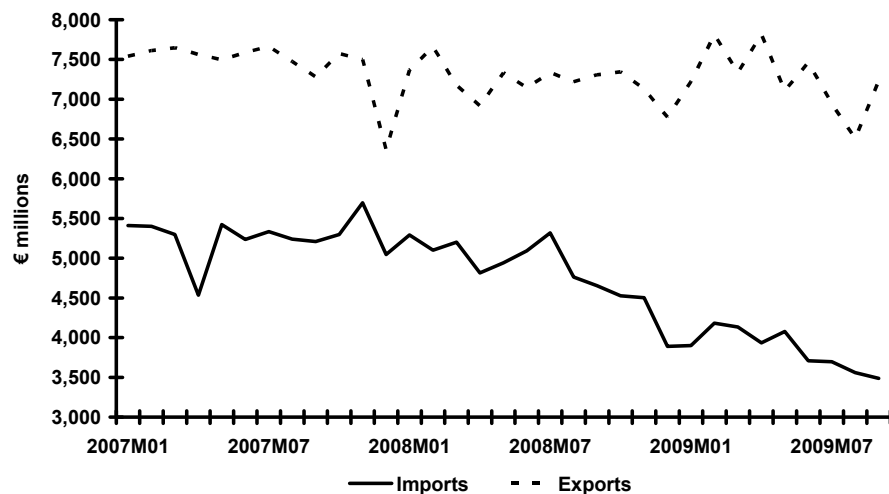
In spite of the collapse in world trade, Irish exports have been remarkably resilient by international standards. The volume of exports fell by 2.7 per cent in the first nine months of 2009, compared to the same period last year. However, the latest *Quarterly National Accounts* show a fall in the third quarter, with export volumes down by 0.6 per cent in Q3 relative to Q2 (seasonally adjusted). This mirrors the recent weakness in volume export growth evident from the trade statistics.

The most recent merchandise trade data show that the merchandise trade surplus continues to rise. This increase is mainly driven by a very dramatic fall in imports, discussed below (Figure 10). Merchandise exports have proved relatively resilient throughout 2009. In the first seven months of 2009 total merchandise exports were broadly unchanged relative to the same period in 2008. However, this aggregate performance masks a significant shift in the composition of total exports. Exports of chemicals and related products increased by 12 per cent, driven by strong growth in pharmaceutical products and organic chemicals. Across the other broad categories, there were significant declines in the exports of electrical machinery and computer equipment; the latter is likely in part to reflect the relocation of Dell to Poland. Furthermore, there has been a fall in exports to the UK of over 16 per cent over the same period, this is most likely driven by the recent weakness in Sterling together with the weak performance of the UK economy.

Table 8: Exports of Goods and Services

	2007		% Change in 2008		2008		% Change in 2009		2009		% Change in 2010		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m			
Merchandise	84,079	-0.8	-3.1	81,495	-4 ¾	-2	79,865	2	3	82,261			
Tourism	4,426	-5.8	-3.3	4,279	-16 ¼	-18	3,509	- ½	-1	3,474			
Other Services	63,534	-1.0	2.2	64,924	1	1	65,573	1	2	66,885			
Exports of Goods and Services	152,039	-1.0	-0.9	150,698	-2 ¾	-1 ¼	148,947	1 ½	2 ½	152,619			
FISIM Adjustment	1,442			1,198			1,196			1,218			
Adjusted Exports	153,481	-1.0	-1.0	151,896	-2 ¾	-1 ¼	150,143	1 ½	2 ½	153,837			

Figure 10: Monthly Merchandise Trade, Seasonally Adjusted



Source: External Trade Statistics, CSO.

In terms of volume exports the performance is less favourable, with the index of merchandise exports in August down 12 per cent on the same month in 2008, and down 4.5 per cent in the year ended August 2009. The corollary of this is that prices of merchandise exports have edged upwards since the middle of 2008, although there are signs that prices have stabilised in recent months. This relatively large fall in volumes has led us revise downward our estimate of volume growth in merchandise trade in 2009 to $-4\frac{3}{4}$ per cent.

The latest statistics from the Centraal Planbureau (CPB) in The Netherlands indicate that world merchandise trade has begun to recover, and indeed has risen strongly in recent months (see Figure 1 in section on international developments above). Its most recent forecasts suggest that in 2010 the volume of world trade could grow by over 7 per cent. Our own forecasts for Irish merchandise export volumes is an increase of 2 per cent in 2010. This can be regarded as a relatively sluggish performance in view of the prospects for world trade next year together with our forecast of a continued weakness in Sterling in 2010. In value terms, our projections are higher, in light of recent price developments. Following a fall of 2.3 per cent in merchandise export prices in 2008, we expect prices to increase by 3 per cent this year and by a further 1 per cent in 2010. These figures imply that the value of Irish merchandise exports will fall by 2 per cent in 2009 and increase by 3 per cent in 2010.

The performance of services exports in the first half of the year has been mixed. The latest Q3 data from the *Balance of Payments* show substantial year-on-year increases in receipts from royalties/licences, business services and other services. However, exports of financial services, insurance and in particular tourism continue to decline. In value terms, total exports of services declined by 0.7 per cent in the year ended September 2009.

Turning to our forecasts, we estimate that the volume of exports will fall by $2\frac{3}{4}$ per cent this year. We are predicting a return to growth in 2010, with an estimated increase of $1\frac{1}{2}$ per cent in total export volumes. With regard to services exports, we are forecasting a very sharp decline in tourism

exports this year. Following a volume fall of almost 6 per cent in 2008, we expect an additional fall of 16¼ per cent this year. Based on the latest *Balance of Payments* data, we estimate that there will be a modest 1 per cent increase in the volume of non-tourism services exports in 2009. We expect these to stabilise in 2010, with a 1 per cent increase in the volume of non-tourism services exports and a further ½ per cent decline in tourism exports.

Imports

Merchandise imports have fallen steeply since the middle of 2008, as shown above in Figure 10. In the year ended September 2009, total merchandise imports fell by over 22 per cent. Imports have declined across all uses, capital goods (21 per cent), consumption goods (13 per cent) and intermediate production (24 per cent), reflecting the very sharp decline in levels of investment and consumption.

By contrast, services imports grew by 3.6 per cent in the year ended September 2009. This was largely due to growth in imports of business services and royalties. During this period tourism imports fell by 7 per cent, while imports of financial services declined by 13.8 per cent, and transport imports by 16.2 per cent.

On the basis of these trends and our forecasts for very sharp declines in both private consumption and investment in 2009, we expect the volume of merchandise imports to fall by 23 per cent this year. Our projections for 2010 imply a much improved performance, with an overall fall of 6½ per cent masking an upturn towards the latter half of 2010. With regard to services imports, we are forecasting a decline in the volume of tourism imports of 9½ per cent this year and 2½ per cent next year. We expect non-tourism services imports to increase by 2 per cent in volume this year, and by ¼ per cent next year.

Balance of Payments

Our forecasts for merchandise exports and imports imply an expansion of the merchandise trade surplus in 2009 and 2010 driven by the sharp fall in imports and the relatively stable performance of merchandise exports. The merchandise surplus is expected to increase by €10.7 billion in 2009 and a further €5.6 billion in 2010. The services trade deficit narrowed significantly in 2007 as a result of strong growth in services exports. The decline in services exports in 2008 has given rise to a reversal of this trend and to a deterioration in the services trade balance. In 2009, we expect the services trade deficit to widen by €1.4 billion. Our forecasts for services exports imply a slight reduction in this deficit in 2010. On the basis of our projections, in particular the expected increase in the merchandise trade surplus, we expect a significant expansion in the overall trade balance to 20¾ per cent of GNP in 2009 and 26 per cent of GNP in 2010.

Regarding net factor flows, the latest *Balance of Payments* data indicate a sharp fall in both investment income inflows and outflows. Inflows fell particularly sharply driving a significant increase in net factor income flows. In the year ending September 2009, direct investment income fell by 31 per cent while there was a 34 per cent fall in portfolio investment income. We expect the net factor income deficit to increase by 11¾ per cent in 2009 and by a further 5¼ per cent in 2010. While the widening of the

Table 9: Imports of Goods and Services

	2007	% Change in 2008		2008	% Change in 2009		2009	% Change in 2010		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Merchandise	64,268	-10.7	-10.3	57,675	-23	-21 ½	45,275	-6 ½	-7	42,106
Tourism	6,300	10.9	12.0	7,055	-9 ½	-10	6,350	-2 ½	-3	6,159
Other Services	62,781	5.3	7.5	67,519	2	3	69,545	¼	2	70,935
Imports of Goods and Services	133,349	-2.1	-0.8	132,249	-9 ½	-8 ½	121,169	-2 ½	-1 ½	119,200
FISIM Adjustment	763			753			764			776
Adjusted Imports	134,112	-2.1	-0.8	133,002	-9 ½	-8 ¼	121,933	-2 ½	-1 ½	119,977

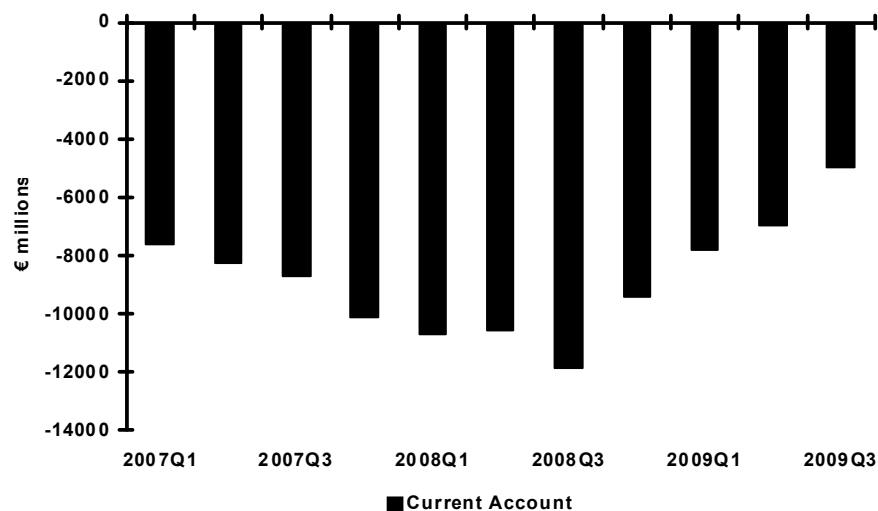
Table 10: Balance of Payments*

	2007 €m	Change %	2008 €m	Change %	2009 €m	Change %	2010 €m
Merchandise Trade Balance	19,811		23,820		34,590		40,155
Service Trade Balance	-1,121		-5,371		-6,812		-6,736
Trade Balance in Goods and Services on BoP Basis	18,690		18,449		27,778		33,419
% of GNP	11.6		11.9		20 ³ / ₄		26
Total Debit Flows	112,737	-1.9	110,605	-20 ¹ / ₄	88,172	-1 ³ / ₄	86,525
Total Credit Flows	84,911	-1.3	83,835	-30 ¹ / ₂	58,280	-5 ¹ / ₂	55,056
Net Factor Flows	-27,826	-3.8	-26,770	11 ³ / ₄	-29,892	5 ¹ / ₄	-31,469
Net Current Transfers	-990		-1,115		-1,163		-1,163
Balance on Current Account	-10,126		-9,436		-3,277		787
Capital Transfers	39		68		300		300
Effective Current Balance	-10,087		-9,368		-2,977		1,087
% of GNP	-6.3		-6.1		-2 ¹ / ₄		³ / ₄

* This table includes adjustments to *Balance of Payments* basis.

merchandise trade surplus should contribute to a narrowing of the current account deficit, the very rapid growth in net factor income outflows means that the overall current account balance is expected to narrow less rapidly than we had previously forecasted. We now expect a deficit on the current account of the balance of payments of -2½ per cent of GNP in 2009, compared to a deficit of -6½ per cent in 2008. The narrowing of the current account deficit which has been taking place over the course of 2008 and 2009 (Figure 11) is expected to continue into 2010 with the result that we expect a surplus on the current account of ½ per cent of GNP next year. Having recorded a deficit on the current account since 2003, this would represent a significant turnaround in Ireland's balance of payments position. Changes in the flow of funds between sectors in the Irish economy which match these developments in the balance of payments are discussed further in Box 4.

Figure 11: Current Account Balance, Annualised Numbers



Source: Balance of Payments Statistics, CSO.

Measures of Growth

Table 11 provides indicators of economic growth, changes in the composition of growth and changes in living standards for recent years and for the forecast period. The first line shows the familiar GNP value, which we forecast will decline by 10 per cent in 2009 and by 1½ per cent in 2010. The fall in GNP per capita is estimated to be slightly steeper. While outward migration will act to reduce the population in 2009 and 2010, the natural increase will dominate thereby giving rise to the steeper fall in per capita terms.

The figures on investment as a share of GNP show something of a transformation in the economy. While the fall-off in building has been painful in terms of employment and the broader impacts on the economy, 2010 should see the end to declines in this sector.

Finally, the last line in the table can be viewed as an indicator of competitiveness. While it is not the case that there is some target level for labour's share of output, the increase in the value of the variable into 2009 points to declining competitiveness. If our forecasts are correct, and in particular if wages fall by 2½ per cent in 2010, there will be a significant improvement in competitiveness and this is reflected in the fall in labour's share in 2010 relative to 2009.

Table 11: Measures of Growth

Growth Indicators	2005	2006	2007	2008	2009	2010
GNP	5.6	6.3	4.4	-2.8	-10	-1½
GNP adj for Terms of Trade	4.5	5.3	1.9	-4.0	-9¾	-1¼
GNDI	4.4	4.7	1.6	-4.1	-10	-1¼
National Resources	4.4	4.7	1.5	-4.1	-9¾	-1¼
GNP per capita (constant prices)	3.3	3.7	2.0	-4.6	-10¾	-1½
Consumption per capita (constant prices)	4.3	3.9	3.5	-2.8	-7¾	-1
Investment in Housing/GNP	14.9	14.8	13.4	9.8	6¼	4
Investment/GNP	31.5	31.2	30.7	25.5	19¼	15½
Investment Building & Construction/GNP	24.3	24.8	23.7	19.4	13¾	10¼
Labour share of GNP	47.7	47.2	48.0	51.1	54½	52½

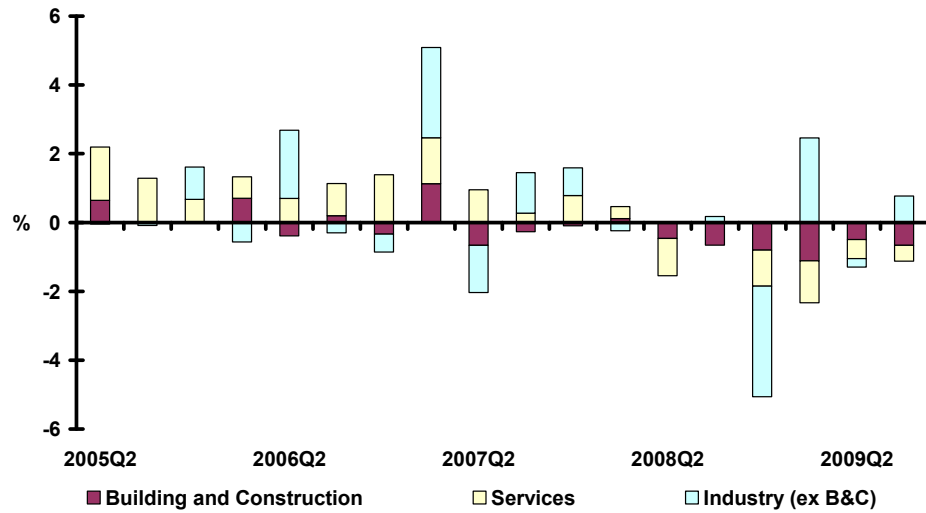
Sectoral Output

The latest *QNA* data on output indicate that total output stabilised in the second and third quarters of 2009. Following a dramatic quarter-on-quarter fall of almost 5.5 per cent in the last quarter of 2008, largely driven by a dramatic fall in industrial output, total output continued to fall slightly in the first quarter of 2009. Figure 12 shows the weighted contributions to the total growth rate in output for three sectors: building and construction, services and industry. The recovery of industrial output in the first quarter of 2009 offsets the continued fall in building and construction and services and has contributed to stabilising total output.

Table 12: GDP by Sector

	2007	% Change		2008	% Change		2009	% Change		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Agriculture	3,985	-0.9	-7.9	3,669	2	-25	2,751	1	0	2,751
Industry:	55,809	-3.6	-6.5	52,163	-7 ¼	-8 ¼	47,859	-2 ¾	-3	46,430
Other Industry	39,633	-0.3	-3.1	38,388	1	2	39,155	2	2 ¾	40,213
Building & Construction	16,176	-11.7	-14.8	13,775	-30 ½	-36 ¾	8,703	-21 ¾	-28 ½	6,217
Services:	108,571	0.3	-2.1	106,334	-3 ¼	-8 ¼	97,529	1 ¼	-1 ¼	96,304
Public Administration & Defence	5,842	1.8	6.1	6,197	-4	-8 ¾	5,661	-3	-11 ¾	4,990
Distribution, Transport and Communications	25,664	-3.3	-1.2	25,349	-8	-8 ¾	23,131	1	1	23,352
Other Services (including rent)	77,065	1.4	-3.0	74,788	-1 ½	-8	68,738	1 ½	-1 ¼	67,962
GDP at Factor Cost	168,366	-1.0	-3.7	162,166	-4 ½	-8 ¾	148,138	0	-1 ¾	145,485

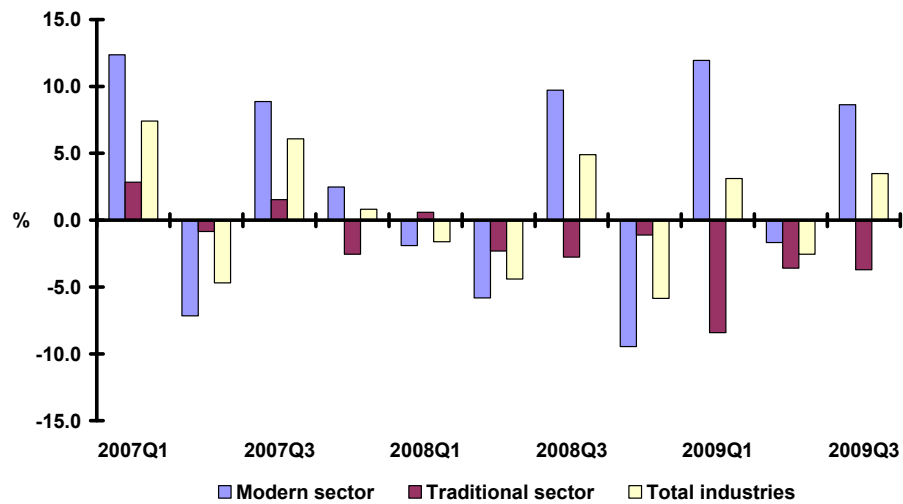
Figure 12: Quarter-on-Quarter Growth Rates, Weighted Contributions²², Seasonally Adjusted



Source: Quarterly National Accounts, CSO.

Data from the industrial production index also suggest that the industrial sector recovered further in the third quarter, driven by growth in the modern sector (see Figure 13). The traditional sector continues to struggle, with a cumulative fall in output of over 20 per cent since the third quarter of 2007. This dichotomy is reflected in the performance in exports, where the pharmaceuticals and organic chemicals sector are performing strongly while total exports have been sluggish.

Figure 13: Quarter-on-Quarter Growth Rates in Industrial Production Index, Seasonally Adjusted



Source: Industrial Production Index, CSO.

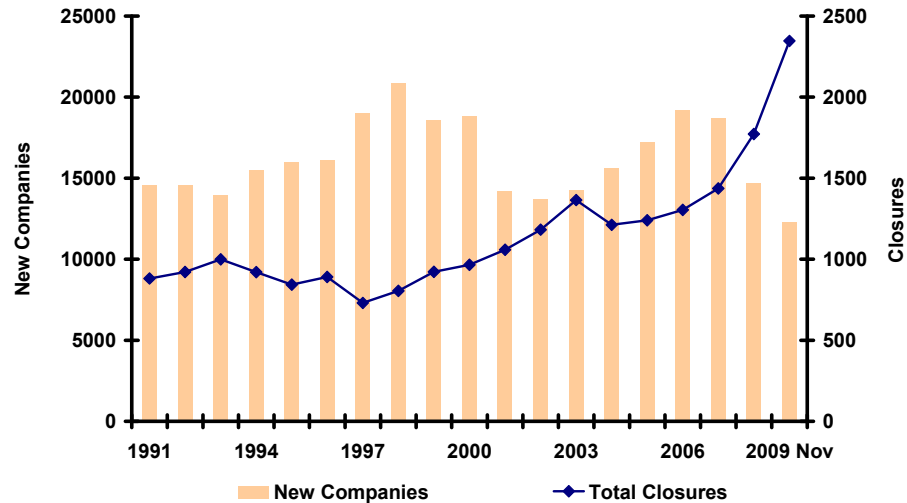
Further indicators on production in the economy present a mixed picture. Data from the Company Registrations Office on new companies and closures²³ (shown in Figure 14) indicate that by November 2009 there

²² Weighted by share in total constant price GDP at factor cost.

²³ The figure for total closures is calculated as the sum of total company liquidations, examinerships and receiverships in each period.

was the highest rate of company closures and lowest rate of new company registrations since 1991. Data from Eirgrid²⁴ indicate there was a sharp decline in electricity demand in the first part of 2009, since then it has stabilised.

Figure 14: New Companies and Closures



Source: Companies Registration Office.

Our estimates for 2009 suggest that total industry excluding building and construction will increase by 1 per cent. For 2010 we expect a pick-up in world trade and our forecast of a modest increase in the demand for Irish merchandise exports to result in total industrial output excluding building and construction increasing by 2 per cent. For construction, we estimate that total output will fall by 30½ per cent in 2009 and 21¾ per cent in 2010. These numbers are discussed in the *Investment* section. For services, we expect a pick-up in private sector services in 2010, especially in the second half of the year when consumption is forecast to pick up. Given a further decline in publicly provided services due to the measures introduced in Budget 2010, we estimate that total services will increase only marginally by 1¼ per cent.

For the agricultural sector, 2009 has been a disastrous year. The recently released CSO estimates of output, input and income in agriculture for 2009 show an overall decline in the operating surplus of over 30 per cent compared to 2008. This decline was driven by sharp falls in the value of agricultural output especially milk and cereals. We estimate that total output fell by 2 per cent, with a 21 per cent fall in average output prices. This means that farm incomes fell by 25 per cent, an extraordinarily large decline. For 2010 we expect that the recent recovery in dairy and beef prices will persist into 2010, with average prices falling only slightly together a modest recovery in volume output of 1 per cent.

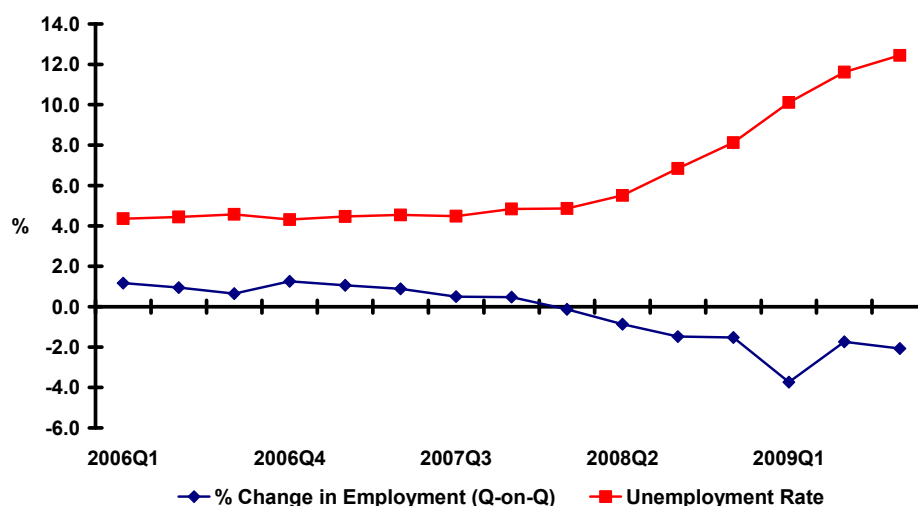
²⁴ <http://www.eirgrid.com/operations/systemperformancedata/electricitystatistics/>

Employment

The latest trends in the labour market are summarised in Figures 15 and 16. Looking first at Figure 16, it can be seen that employment falls and increases in the rate of unemployment persisted into the third quarter of 2009. Employment has now been falling since the first quarter of 2008 (quarter-on-quarter, seasonally adjusted). Unadjusted, employment peaked at 2.15 million in Q3 2007; in Q3 2009 it was measured at 1.92 million, a fall of over 220,000 or approximately 10 per cent. In the year ended Q3 2009, employment fell by 183,000 or 8.8 per cent.

Unemployment has also continued to rise and was recorded at 12.4 per cent in Q3 (or 12.7 per cent unadjusted). According to the Live Register, the seasonally adjusted standardised unemployment rate was 12.5 per cent in November so it appears that some stabilisation in the trend in unemployment is occurring. This is reflected in the pattern of monthly increases in the numbers on the Live Register, as shown in Figure 15.

Figure 15: The Unemployment Rate and Quarter-on-Quarter % Change in Employment, Seasonally Adjusted



Source: Quarterly National Household Survey, CSO.

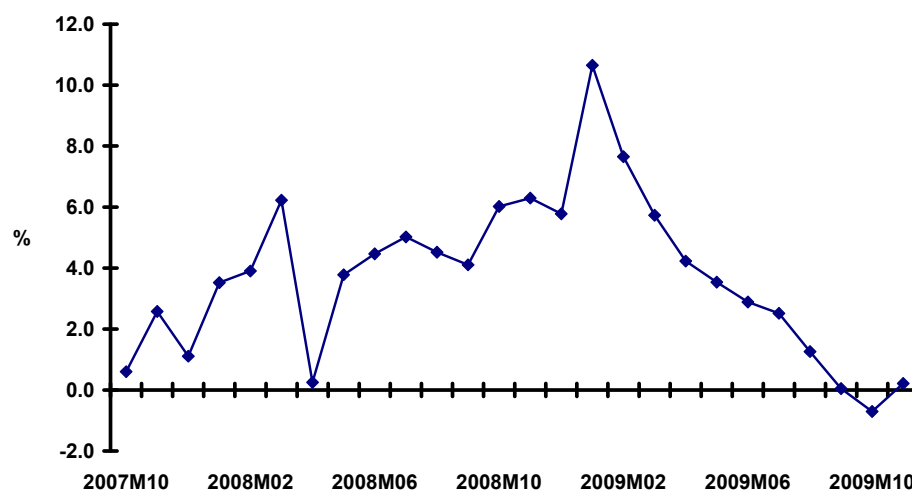
In addition to employment falls, the latest *QNHS* shows a fall in the labour force of 63,000 in the year ended Q3 2009, a fall of 2.8 per cent. A number of factors lie beneath this figure. First, the participation rate is falling. In Q3 2008, the participation rate was 64.2 per cent; in Q3 2009 it was down to 62.5 per cent. With approximately 3.5 million people in Ireland aged over 15 years, every 1 percentage point fall in participation amounts to 35,000 people. Hence, the fall in participation between Q3 2008 and 2009 translates into a labour force fall of 53,600. The CSO estimate that the remaining 10,600 fall in the labour force is made up of demographic factors, i.e. migration and population ageing. We know from the *QNHS* that there were 40,500 fewer non-nationals in the labour force in Q3 2009 relative to Q3 2008. This suggests that around 30,000 Irish people entered the labour force through ageing, i.e. turning 15 years, or return migration and this is consistent with the CSO estimate that the number of Irish people in the labour force fell by 23,000 between Q3 2008 and Q3 2009.

Table 13: Employment and Unemployment

	Annual Averages 000s			
	2007	2008	2009	2010
Agriculture	111	115	98	90
Industry	564	520	412	371
Services	1,448	1,465	1,420	1,393
Total at Work	2,123	2,100	1,930	1,854
Unemployed	101	141	258	298
Labour Force	2,224	2,241	2,188	2,152
Unemployment Rate %	4.6	6.3	11 ¾	13 ¾
Net Migration	67.3	38.5	-7.8	-40.0
of which: Inward Migration	109.5	83.8	57.3	30.0
Change in Participation Rate*	1.1	-0.3	-1 ¼	-1 ¼

•Note: Participation rate measured as share of population aged 15-64 years; based on Q2 figures as are migration figures.

Figure 16: Monthly Increase in the Live Register, Seasonally Adjusted



Source: Live Register, CSO.

Other interesting dimensions of the *QNHS* data are the trend in part-time and full-time employment and in hours worked. The total fall in employment in the year of almost 185,000 is made up of a fall in full-time employment of over 202,000 and a rise in part-time employment of almost 18,000. Average hours worked has fallen from 36.3 hours in Q3 2008 to 35.5 hours in Q3 2009, a fall of 2.2 per cent. These trends are consistent with those discussed in the box on earnings where reductions in hours worked appear to be playing a significant role in adjusting to depressed economic conditions.

Turning to our forecasts, we expect employment to average 1.93 million in 2009, falling to 1.85 million in 2010. These figures imply employment falls of almost 8 per cent in 2009 and 4 per cent in 2010. While the rate of job losses is unlikely to match that of Q1 2009, we still expect to see

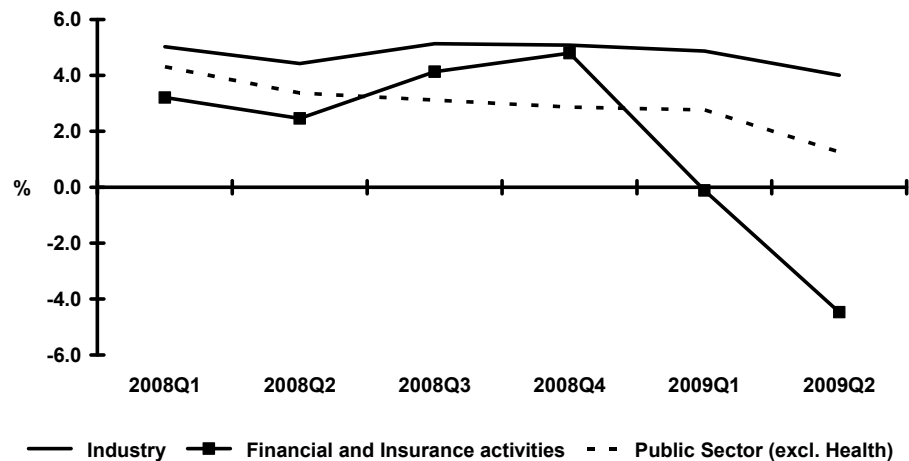
employment falls due to reductions in the public sector, in the banking and financial sector and in construction, with subsequent effects on employment elsewhere. We expect the rate of unemployment to peak at 14 per cent next year. The fall in participation which has been observed in recent quarters is expected to continue into next year. We expect to see a fall of 1 percentage point in participation in 2010, following an expected decline of 1¼ percentage points this year.

As regards migration, we expect net outward migration of 40,000 in the year ending April 2010. As noted above, the non-Irish national population (aged over 15 years) is estimated to be 44,800 lower in Q3 2009 relative to the same quarter twelve months earlier. Given that employment among non-Irish nationals is down 61,600 over the same period (or almost 20 per cent) it is unsurprising that an outflow would emerge. The impact of the current recession on the migration behaviour of Irish people is less clear at this stage, although media stories are now beginning to appear detailing examples of outward migration.

Incomes

The most recent earnings statistics available from the CSO relate to the second quarter of 2009, and are currently limited to the industry, financial and public sectors. Figure 17 shows the annualised growth rates in average weekly earnings across the various sectors. Growth in industrial earnings remains strong, estimated at 4 per cent in the year ending 2009 Q2. Weekly earnings in the financial and insurance sector fell sharply in the first two quarters of the year, contributing to an annualised decline of 4.5 per cent in Q2. As shown, annual wage growth in the public sector moderated considerably in the second quarter of the year. This was largely due to the imposition of the public sector pension levy, which we have treated as a wage cut.²⁵

Figure 17: Annual Wage Growth (%), Weekly Earnings



Source: EHECS and Public Sector Survey, CSO.

²⁵ In the official data series provided by the CSO, earnings represent the gross amount payable by the organisation to its employees before deduction of tax, PRSI and other levies, including the pension levy. However, for the purpose of our own analysis, we have treated the pension levy as a nominal wage cut amounting to 7 per cent of average public sector earnings.

Table 14: Personal Disposable Income

	2007	Change		2008	Change		2009	Change		2010
	€m	%	€m	€m	%	€m	€m	%	€m	€m
Agriculture, etc.	3,249	-11.0	-359	2,890	-25	-723	2,168	0	0	2,168
Non-Agricultural Wages	77,328	2.1	1,601	78,929	-8 ¾	-6,811	72,118	-6 ¼	-4,425	67,693
Other Non-Agricultural Income	15,440	26.5	4,098	19,539	-12 ¾	-2,498	17,041	1	177	17,218
Total Income Received	96,018	5.6	5,340	101,358	-10	-10,032	91,327	-4 ¾	-4,248	87,079
Current Transfers	21,674	12.1	2,631	24,305	8 ½	2,054	26,359	8 ¼	2,147	28,506
Gross Personal Income	117,692	6.8	7,971	125,663	-6 ¼	-7,978	117,686	-1 ¾	-2,101	115,585
Direct Personal Taxes	23,559	-1.0	-226	23,332	-6	-1,394	21,938	1 ¼	257	22,194
Personal Disposable Income	94,134	8.7	8,197	102,331	-6 ½	-6,583	95,748	-2 ½	-2,357	93,390
Consumption	91,948	2.1	1,915	93,863	-9 ¾	-9,189	84,674	-1 ½	-1,266	83,408
Personal Savings	2,186			8,468			11,074			9,983
Savings Ratio	2.3			8.3			11 ½			10 ¾
Average Personal Tax Rate	20.0			18.6			18 ¾			19 ¼

The trend that emerges from the earnings data varies considerably, depending on the measure of earnings used. The best example of this is seen in the financial sector earnings. As mentioned above, average weekly earnings in this sector fell by 4.5 per cent in Q2 on an annualised basis. In the same period, average hourly earnings fell by 3.6 per cent, while average hourly earnings excluding bonuses actually increased by 4.1 per cent. The trend in weekly earnings might suggest that nominal wage reductions have occurred in this sector. However, the additional evidence on hourly earnings indicates that employers may be reducing their labour costs by adjusting weekly hours worked and by reducing or removing bonus payments. This issue is discussed in greater detail in the Box on private sector earnings below.

The evidence suggests that there have not been widespread nominal wage reductions yet, in spite of the extensive anecdotal evidence. However, an actual reduction in earnings is undoubtedly central to our analysis given the implications for competitiveness. Our forecast for wage growth in 2009 is unchanged from our last *Commentary* – we expect wages to fall by 1 per cent this year. As mentioned above, this takes account of the public sector pension levy, which we treat as a pay cut. Our forecast for 2010 is also unchanged – we expect wages to fall by 2½ per cent, taking account of the public sector pay cuts announced in the Budget and assuming further reductions in earnings in the private sector.

Combined with our employment projections, these forecasts imply a 10 per cent fall in total income received in 2009. Current transfers are expected to increase by 8½ per cent this year, while direct taxes are forecast to fall by 6 per cent, given the significant employment losses throughout the year. As a result, we expect personal disposable income to fall by 6½ per cent in 2009. For 2010, we expect total income received to fall by 4¾ per cent. We are forecasting a reduction of 8¼ per cent in current transfers, taking account of our revised estimate of unemployment and the reductions in welfare payments announced in the Budget. Combined with the limited change to direct taxes, these forecasts imply a 2½ per cent fall in personal disposable income in 2010. The projected fall in consumption in 2009 exceeds the projected fall in personal disposable income, resulting in a significant increase in the savings rate. As mentioned in the *Consumption* section, we assume that the decisive action taken in Budget 2010 removes an element of uncertainty for consumers regarding their likely disposable income levels next year. As such, we expect the savings rate to fall from 11½ per cent in 2009 to 10¾ per cent in 2010.

Box 3: Developments in Private Sector Wages

It has been widely argued that a fall in nominal wage rates would facilitate a more rapid economic recovery, particularly a recovery in employment. Recent data show that average hourly earnings (excluding bonuses and other irregular payments) in the industry sector registered a year-on-year increase of 4.8 per cent in 2009 Q2. Such an increase is surprising and contradicts the recent anecdotal evidence of nominal wage reductions. A possible explanation for the observed increase in average earnings could be the compositional shift in employment in this sector. The extent of employment losses has been highest among the lower-paid occupational

groups. According to the EHECS²⁶ data on employment in the industry sector, 95 per cent of the reduction in employment in the year ending June 2009 was accounted for by production, transport, craft and other manual workers. Such a change in the composition of total employment would be expected to drive up average earnings per employee in the sector. However, as Table A shows, average hourly earnings in the industry sector increased at each of the three occupation levels in Q2 relative to the same period last year. Using the information on hourly earnings and employment by occupation level, we can calculate an estimate of the total industrial wage bill per hour. Holding employment constant at its 2007 level (i.e. assuming no compositional shifts in employment) we find that the hourly industrial wage bill still registers a year-on-year increase of 3 per cent in 2009 Q2.

Table A: Year-on-Year % Change in Earnings and Hours Worked, 2009 Q2²⁷

	Hourly Earnings	Hourly Earnings (excl. bonuses)	Weekly Earnings	Weekly Hours Worked
Industry				
Production, Transport, Craft & Manual	3.7	3.5	-1.5	-6.8
Clerical, Sales & Service Managers, Professionals	1.8	2.3	-0.5	-4.7
	0.4	2.4	0.6	-1.2
Financial & Insurance Activities				
Production, Transport, Craft & Manual	7.4	6.2	7.3	-5.7
Clerical, Sales & Service Managers, Professionals	-4.2	1.3	-5.4	-5.2
	-13.9	1.6	-14.9	-5.8

Source: Earnings, Hours and Employment Costs Survey, CSO

Table A also highlights the differences in trend among the various measures of earnings. The weekly data suggest that wages are indeed falling, with the year-on-year decline particularly severe for the two higher occupation groups in the financial sector. The differences in trend between hourly and weekly earnings are partly due to changes in the number of hours worked per week. The EHECS data show that in both the financial and industry sectors, the number of hours worked per week declined in Q2 at each occupation level, relative to the same period in 2008. This trend is confirmed by the employment numbers – in both sectors the share of part-time employees in total employment has increased in the last year.

A second reason for such disparity in trends among the different measures of earnings is the recent developments in bonus payments. This is most evident in the earnings of higher occupational workers in the financial sector. Both weekly earnings and average hourly earnings (first column of Table A) include all irregular payments, such as bonuses. These measures of earnings have registered very sharp year-on-year declines, particularly for financial sector managers and professionals. Given the difficulties experienced by companies in the financial sector over the last year, the reduction in (or non-payment of) bonuses is not surprising. However, the data on hourly earnings excluding irregular payments show a year-on-year increase of 1.6 per cent for managers and professionals.

²⁶ Earnings, Hours and Employment Costs Survey, conducted by the CSO.

²⁷ The figures for Q2 are preliminary estimates.

The information from the EHECS data, which to date only covers certain sectors of the economy, suggests that there is no formal evidence, as yet, of reductions in nominal wage rates. Private sector employers appear to be reducing their wage bills by alternative means, through the non-payment of bonuses and a reduction in weekly hours worked. While there has been some anecdotal and survey evidence suggesting that nominal wage reductions have been taking place since the first quarter of the year, it may be the case that respondents are merely observing significant reductions in their take-home pay. The evidence presented here would also provide an explanation for the lower than anticipated income tax receipts – a reduction in working hours and non-payment of bonuses both serve to reduce the amount of taxable income.

A number of other important considerations should be borne in mind when attempting to identify trends in private sector earnings. The sectoral wage data based on the new EHECS survey are a relatively new series and they tend to display considerable volatility compared to the old series. In addition, the coverage of the new series is currently limited to the industrial and financial sectors. Based on the estimate of total employment from the Q2 *Quarterly National Household Survey*, these two sectors account for just 15 per cent of total employment. Approximately 20 per cent of total employment is accounted for by public sector employees and we know that these workers have already faced an effective reduction in their nominal wages, with additional cuts due to be imposed in January. Furthermore, the latest data on earnings in the construction sector relate to the last quarter of 2008. Given the persistent difficulties and the loss of employment in this sector, it is likely that there has been some moderation in wage rates throughout 2009. A considerable percentage of the workforce remains unaccounted for among the current earnings data and, with this in mind, a degree of caution must be exercised when making statements about trends in economy-wide wage rates.

Consumer Prices

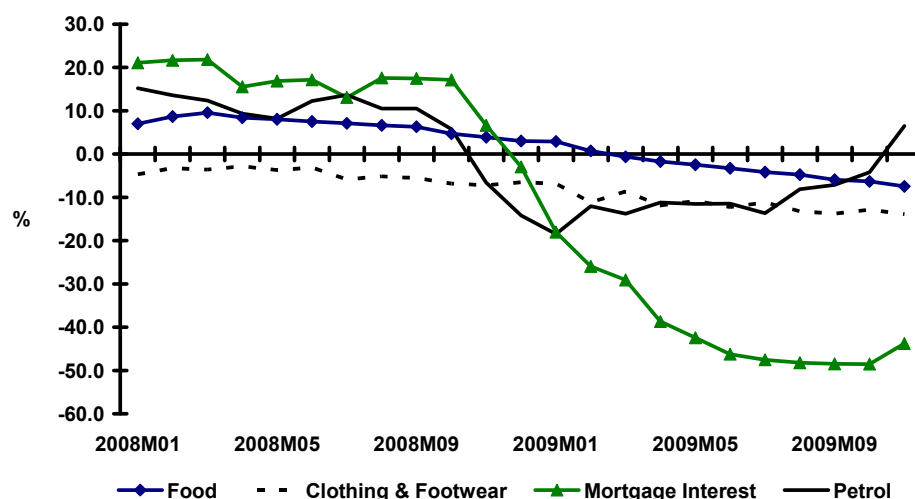
According to the latest figures from the CSO, the Consumer Price Index (CPI) fell by 5.7 per cent in November 2009, compared to November 2008. This figure represents the slowest pace of price decline in five months, suggesting that the year-on-year inflation rate may have reached its trough. The pace of decline in the Harmonised Index of Consumer Prices (HICP) has also slowed. This index fell by 2.8 per cent in November, year-on-year.

As discussed in previous *Commentaries*, the single biggest contributor to the volatility in the CPI in the recent past has been the mortgage interest component and this can be seen clearly in Figure 18. In early 2008, year-on-year inflation in this sub-index was as high as 22 per cent. Eighteen months later, the mortgage interest component registered a year-on-year fall of 50 per cent. However, as the rate of HICP inflation has also fallen considerably over the last year, there have clearly been other significant contributors to the developments in consumer prices²⁸. Oil prices have fluctuated substantially since early 2008 and this has fed through to the prices of petrol, diesel and home-heating oil. As shown in Figure 18, the

²⁸ The main difference between the two indices is that the HICP does not include mortgage interest. It also excludes building materials, union subscriptions, car insurance, house insurance and car tax.

year-on-year change in the petrol sub-index reached 14 per cent in July 2008, before falling as low as -19 per cent in early 2009. Petrol prices have been rising again in recent months, as the crude oil price increases during the summer have fed through to pump prices. The depreciation of Sterling relative to the Euro since late 2007 has also affected consumer prices. The impact of these exchange rate movements is strongest on the prices of goods that are heavily imported from the UK, and so the prices of food items and clothing and footwear have fallen considerably over this time period, as shown in Figure 18.

Figure 18: Year-on-Year Inflation by Selected Sub-indices, January 2008 - November 2009



Source: Consumer Price Index, CSO.

Turning to our forecasts, we expect the CPI to fall by 4½ per cent in 2009 and by ½ per cent in 2010. We are forecasting a fall of 1¾ per cent in the HICP this year, and a further fall of 1 per cent next year. We have revised our forecasts for 2010 downward since the last *Commentary* and this is largely due to Budget 2010. The various changes to taxation have a net positive effect on CPI inflation, but this effect is very low (less than 0.1 per cent).. We have maintained our technical assumption regarding ECB interest rates – we assume that the main refinancing rate will increase to 1.75 per cent by the end of 2010, with no increase in the first six months of the year. In addition, we expect to see an increase in the domestic interest rates on variable rate mortgages, independent of any ECB increases. In the period 2003-2007 prior to the financial crisis, Irish interest rate margins were low by international standards. Margins declined further from the onset of the crisis due to the sharp decline in lending rates, especially for mortgages which are predominantly on tracker and variable rate terms (IMF, 2009). It appears likely that the Irish banks will raise their rates once NAMA is up and running, in order to restore margins and meet the costs of funding.

Table 15: Inflation Measures (%)

	2006	2007	2008	2009(f)	2010(f)
CPI	3.9	4.9	4.1	-4½	-½
Mortgage Interest	31.4	40.4	15.0	-40	8¼
HICP (Ireland)	2.7	2.9	3.1	-1¾	-1
HICP (Euro Area)	2.2	2.1	3.3	0.2	0.9

PRIVATE SECTOR CREDIT

The annual rate of change in headline private sector credit (PSC) declined in June for the first time since the Central Bank began compiling the series on the current basis in 1993. Since June the annual rate of change has continued to decline and had fallen further to -3.4 per cent by September. As shown in Table 16, valuation effects, including write downs of loans and higher bad debt provisions due to weak economic conditions, have contributed significantly to the decline in headline PSC over the course of the year. Excluding these valuation effects there has been a small decline in the underlying stock of private sector credit as debt repayment exceeds the expansion of new credit.

Within the headline PSC, residential mortgages (including securitisations) which account for 85 per cent of household lending from Irish credit institutions declined in September for the sixth consecutive month. These are the first recorded declines in mortgage lending since the monthly series began in 1990. The rate of growth in mortgage lending from a year earlier declined to just 0.3 per cent in September, its lowest level on record. Total mortgage lending outstanding at the end of September stood at €147.9 billion.

Table 16: Private Sector Credit

	End-month	Private Sector Credit € million	Unadjusted Growth year- on-year %	Adjusted year- on-year %
2006	February	267,861	30.1	29.4
	March	271,364	28.7	29
	June	288,637	27.3	30.3
	September	302,730	25.5	28.1
2007	December	317,801	22.8	25.9
	March	328,265	21.0	23.2
	June	342,774	18.8	20.2
	September	360,112	19.0	19.5
2008	December	376,796	18.6	17
	March	384,340	17.1	17.1
	June	392,937	14.6	14.1
	September	399,143	10.8	10.5
2009	December	395,070	4.9	7.3
	March	392,258	2.1	2.4
	June	387,350	-1.3	-0.8
	September	378,086	-5.3	-3.4

The decline in private sector credit is most likely driven by both a contraction in credit supply and credit demand. The ECB’s Bank Lending Survey provides some evidence on credit conditions.²⁹ According to the

²⁹ Banks were asked using a 5 point scale how credit standards changed during the third quarter of 2009. Higher numbers (greater than 3) indicate easing supply conditions and greater demand, lower numbers imply the opposite while responses equal to 3 indicate no change from the previous survey.

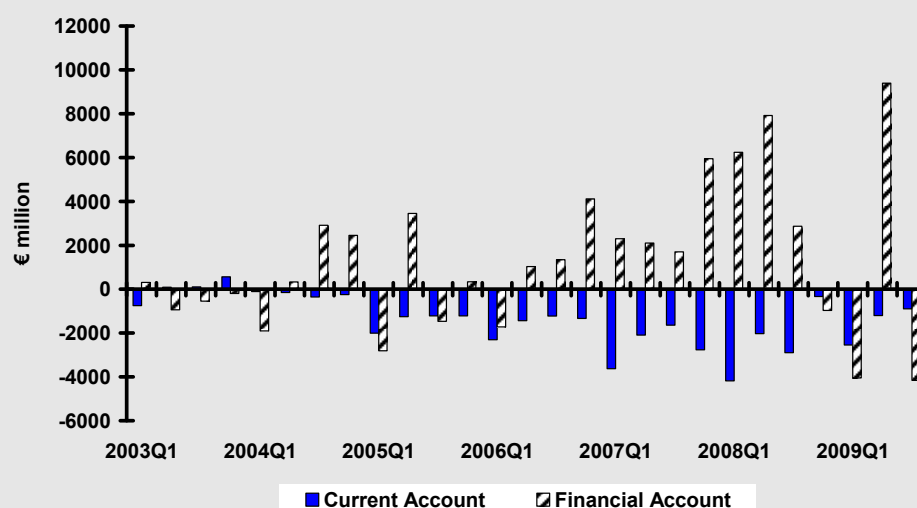
latest survey results for the three months up to the end of October, credit supply has contracted reflecting tighter lending standards due to the balance sheet constraints of financial institutions, while credit demand has also weakened reflecting the difficult economic conditions and the weakness of the domestic economy.

Based on the responses of senior lending officers in the participating banks, the survey results indicate that credit standards to both households and enterprises tightened during the third quarter of 2009. For households, credit standards for house purchase tightened during the third quarter but were unchanged for consumer credit and other lending. Demand for loans to enterprises declined during the third quarter and supply conditions remained tight.

Box 4: Balance of Payments

The current account of the balance of payments deteriorated significantly between 2003 and 2008 (Figure A).

Figure A: Balance of Payments



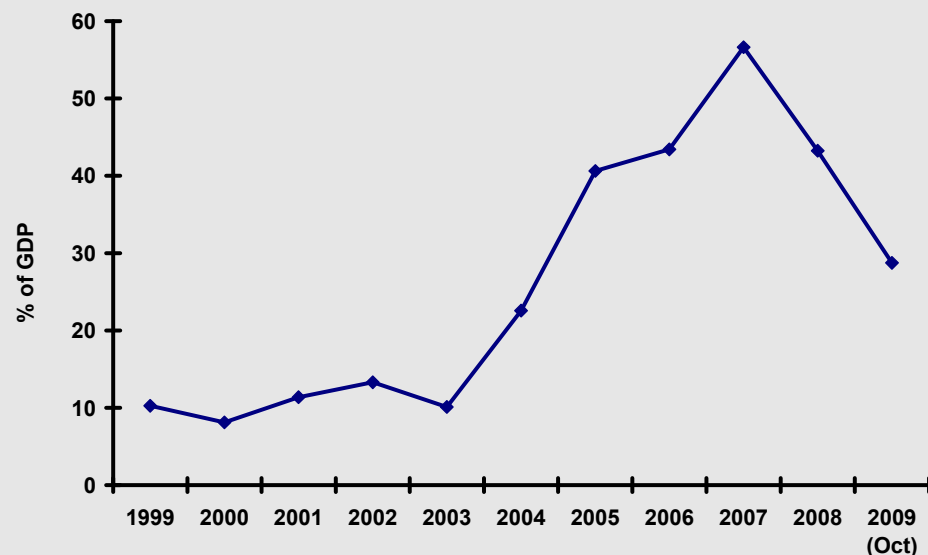
Source: Balance of Payments Statistics, CSO

The corollary to the widening deficit on the current account has been an increase in net investment inflows into Ireland through the financial account of the balance of payments.³⁰ The scale of these investment inflows has been enormous. Total investment inflows increased by over 73 per cent between 2003 and 2007, peaking at over €135 billion in the first quarter of 2008. The largest increase in both inflows and outflows was in the portfolio and other investment income categories. This is a relatively recent development as traditionally factor flows on the current account have been driven by direct investment income flows due to profit repatriations by foreign multinationals and the repayment of national debt interest abroad.

³⁰ In recent years net errors and omissions on the balance of payments has also grown, in 2009 Q2 it stood at over €8 billion.

The increasing investment inflows on the financial account of the balance of payments were used to fund the massive increase in the share of building and construction investment in Ireland over this period. The increase in housing investment was funded through an increase in household borrowing through the banking system. The value of total residential mortgages outstanding increased by 125 per cent between December 2003 and December 2007, from €54 billion to €123 billion. In turn the banking sector financed this increase in housing investment by borrowing extensively from abroad as illustrated in Figure B. In 2003, the net indebtedness of Irish banks to the rest of the world stood at just 10 per cent of GDP. By the end of 2008 this had increased to almost 60 per cent. Funds provided by the Central bank as part of the ECB's monetary policy operations are not included in the net foreign liabilities of the banking system.

Figure B: Net Foreign Liabilities of the Banking System, % of GDP

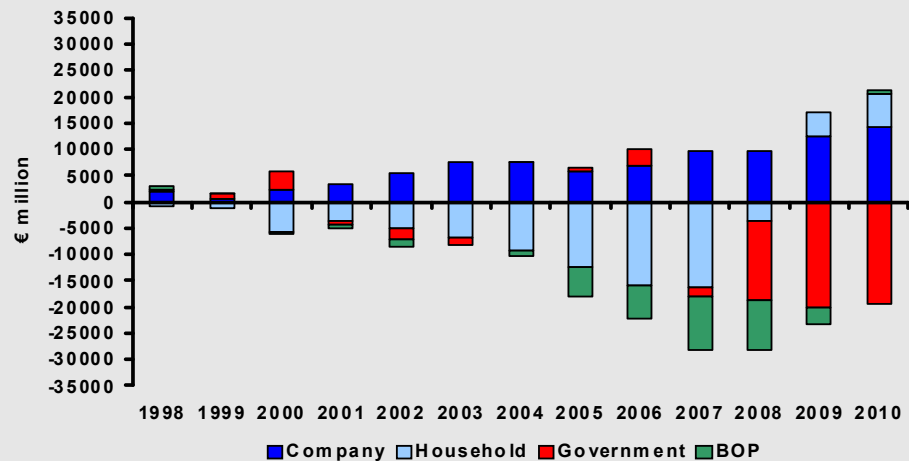


Source: Central Bank Monthly Statistics

During the course of 2009, the balance of payments and the net external position of the banking system have been changing rapidly. Underpinning these changes are significant developments in the flow of funds between sectors in the Irish economy. As illustrated in Figure C, the decline in the financing needs of the household sector (related to the decline in housing investment) as well as the increase in the household savings rate is expected to result in the rate of net acquisitions³¹ of the household sector moving into surplus in 2009 and 2010. The emerging surplus on the current account of the balance of payments, in turn matched by these developments in the flow of funds, contrasts with the position of other European countries, such as Portugal, which in 2009 will record large current account and government deficits.

³¹ This is the difference between household savings and household investments in each calendar year.

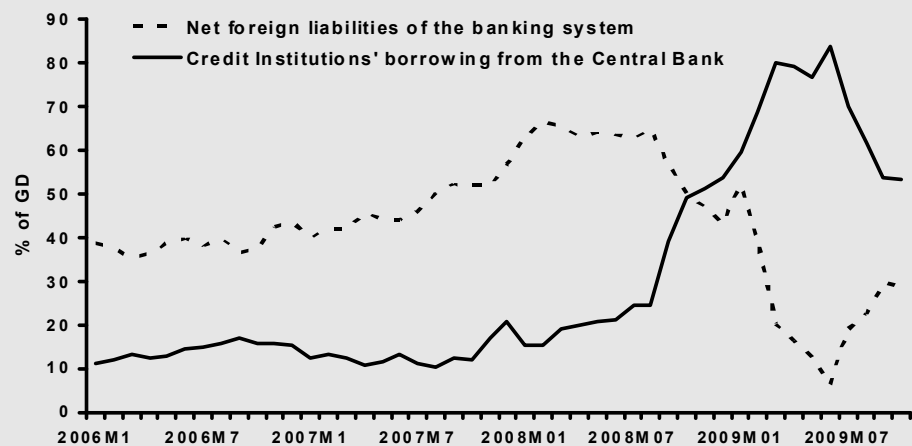
Figure C: Flow of Funds in the Irish Economy³²



Source: Balance of Payments Statistics and own calculations.

Deleveraging by the household and company sectors can be expected to result in some reduction in the net foreign liabilities of the banking system as Irish banks repay some of their net foreign borrowing. However, the dramatic decline in the net external indebtedness of Irish banks which has taken place over the course of 2008 and 2009 (Figure D) is not solely due to the repayment of banks' foreign liabilities.

Figure D: Net Foreign Liabilities of the Banking System and Credit Institutions Borrowing from the Central Bank, % of GDP



Source: Central Bank Monthly Statistics.

Tensions in interbank lending markets since late 2008 hampered the ability of Irish banks' to roll over their external liabilities; instead they have replaced this borrowing with funding from the Irish Central Bank. Figure D shows the sharp rise since September 2008 in Irish banks' borrowing from the Central Bank. This lending to credit institutions by the Irish Central bank has in turn been funded by the ECB through longer-term

³² The flow of funds shows the net acquisitions of the household, company and government sectors. These together sum to the balance on the current account of the balance of payments. The figures are based on own calculations.

refinancing operations (LTRO).³³ As shown in Table XX below, lending by the Irish Central Bank peaked at over €130 billion in June 2009, up from €88 billion in December 2008. This was equivalent to over 21 per cent of total Euro system lending to institutions in the Euro Area, up significantly from an average of 6 per cent in 2007. As access to wholesale funding has improved with the gradual return to normality in international money markets and the fall in interbank lending rates, credit institutions have reduced their dependence on Central Bank funds as shown in Table A. In addition the net acquisition of assets by the household sector, as reflected in the flow of funds, is contributing to a reduction in the liabilities of the banking system, both domestic and foreign. This trend can be expected to persist into 2010 as the net acquisition of assets by the household sector continues (Figure C). The most recent Central Bank statistics for the period up to the end of October show a decline, for the fourth consecutive month, in the funds provided by the Central Bank as part of the ECB's monetary policy operations. As the ECB begins the gradual withdrawal of emergency support measures, borrowing by financial institutions from the Central Bank is likely to decrease further.

Table A: Central Bank Lending to Credit Institutions in Ireland

		€ Million	Eurosystem	Credit	Credit
		Lending by	Lending to Euro	Institutions	Institutions'
		the Irish	Area Credit	in Ireland,	Borrowing from
		Central Bank	Institutions in	share of	the Central
		to Credit	Euro, related to	Eurosystem	Bank, % of GDP
		Institutions in	MPO	lending	
		Ireland in Euro			
2007	March	24,020	421,633	5.7	12.7
	June	25,535	438,038	5.8	13.5
	September	23,751	420,169	5.7	12.5
	December	39,449	475,324	8.3	21.0
2008	March	34,395	483,600	7.1	19.0
	June	38,373	460,645	8.3	21.2
	September	58,671	471,362	12.4	39.2
	December	88,562	613,857	14.4	54.0
2009	March	120,628	607,356	19.9	79.8
	June	130,423	615,980	21.2	83.9
	September	91,573	583,939	15.7	53.9

³³ In June this year, €442 billion was lent to Eurosystem Central Banks' as part of a 12-month longer-term refinancing operation (LTRO). Under this operation, the Eurosystem provides longer term refinancing to institutions in return for assets which are eligible as collateral in its credit operations. The ECB will offer its final 12 month refinancing operation in December 2009.

GENERAL ASSESSMENT

2009 has been an enormously difficult year for the Irish economy. We now expect that GNP will have contracted by 10 per cent. We know that the rate of unemployment has risen from 8.5 per cent in December 2008 to 12.5 per cent in November 2009. The earnings of those in the public sector and in agriculture are well down on 2008, with pay cuts also occurring in the other sectors. The general government deficit for 2009 will be around 11¾ per cent, in spite of the large corrective measures contained in Budget 2009 (October 2008), in the additional measures introduced in February (including the public service pension levy) and in April's Supplementary Budget. Given the events of 2009, the obvious question that arises is whether 2010 will bring an improvement in the fortunes of the Irish economy and whether, as stated in the Budget 2010 speech, "the worst is over".

At the macro-level, our forecasts suggest that the worst is over and that the rate of economic contraction experienced in 2009 will not continue. However, we do expect GNP to be lower in 2010 relative to 2009, by 1½ per cent, as a result of on-going falls in output in the first half of the year. We also expect the rate of unemployment to rise further, peaking at close to 14 per cent in the latter part of 2010. In general, we see 2010 as a year in which the recession of 2008/9 will end, with a return to modest growth occurring in the second half of the year.

While our expectations for 2010 are modest, we can envisage a return to a reasonable pace of economic growth in 2011 subject to favourable developments in a number of areas. We have identified these areas in setting out our thoughts on the economy in earlier *Commentaries* so we will do so again here.

Let us begin with the international environment. Possibly the best economic news of 2009 came in the GDP figures for Q2 when it was shown that Germany, France and Japan had emerged from recession earlier than expected. These positive developments were added to in Q3 when the Euro Area and the US also emerged from recession. It remains uncertain as to whether the growth that we are observing in the world's major economies will be sustained. However, the prospects for the major economies have brightened measurably during the course of 2009 and so it now appears that there will be a supportive international environment facing Ireland during 2010 and 2011.

The next area of importance from the perspective of recovery is the public finances. As is the case with the international context, it is possible to have substantially more confidence at the end of 2009 relative to the beginning. This is because of the decisive action taken by the government

both in February, in announcing the public sector pension levy, in the April Supplementary Budget and more recently in Budget 2010.

Beginning with our *Commentary* of Autumn 2008, we argued that the public finances had moved onto a trajectory that was unsustainable and which threatened to impede recovery. As a result, it was necessary to put in place a strategy through which the structural deficit would be reduced over a series of budgets. This would mean that sustainability could be restored to the public finances without imposing unduly contractionary Budgets in any one year. In advance of Budget 2010, we argued that the €4 billion of savings set out in the Supplementary Budget of April was appropriate. We also argued that the balance of adjustment should be made via expenditure reductions, based on the international evidence on the relative impacts of tax increases and expenditure cuts in the context of fiscal correction. On both counts, Budget 2010 was in line with what would generally be considered as sound fiscal management, a macro level, and should contribute to restoring confidence in the economy and in the policymaking process both nationally and internationally. Some micro-elements of the Budget are perhaps more open to criticism, such as the exclusion of all pensions from any reductions regardless of the wealth of the individuals concerned. Similarly, the car scrappage scheme is also open to the criticism that it may simply lead to a substitution in spending as opposed to generating new spending. Such schemes have been employed elsewhere but typically in countries where cars are produced.

Further corrective action will be needed in 2011 and beyond. The announcement in the Budget that property taxes and water charges will form part of this adjustment can again be welcomed, based on previous ESRI research and on the report of the Commission on Taxation. We have argued that further increases in taxation would have to form part of the overall strategy to correct the public finances, even if 2010 was not the appropriate year in which to introduce such tax changes. A property tax will represent a broadening of the tax base; charging for water will raise revenue and will also provide correct incentives for water usage. In this context, the announcement in this Budget of the introduction of a carbon tax is also a correct move, based on both environmental and tax broadening principles.

Competitiveness has been a theme in the *QEC* since long before the present crisis but the importance for Ireland of regaining the ground lost in the middle and latter parts of this decade is now more acute. Ireland now needs to generate an internal devaluation, with prices and wages falling, mirroring the impact of a currency devaluation which is, of course, no longer possible. Looking first at the general price level, relative movements in prices between Ireland and both the Euro Area and the UK are positive from Ireland's perspective. As shown in Table 1, HICP inflation in the Euro Area is expected to be 0.2 per cent in 2009 and 0.9 per cent in 2010; the corresponding figures for the UK are 2.1 and 2.7 per cent. For Ireland, HICP inflation is expected to be $-1\frac{3}{4}$ per cent this year and -1 per cent in 2010.³⁴

³⁴ It should be noted that any further weakening of Sterling would counteract the benefits of relative price movements between Ireland and the UK. Of course, the weakness of Sterling has itself contributed to the different inflationary trajectories between the two countries.

Turning to wages, and as discussed in the Box on earnings above, our expectation from earlier in the year that wage cuts would be a widespread feature of the economy in 2009 has not materialised, at least when measured by hourly earnings in industry. The evidence that is available appears to suggest that the main route of labour adjustment in the private sector has been through reductions in overtime payments and bonuses and also through reductions in hours worked.

As discussed in Bergin *et al.* (2009)³⁵, wage reductions across the economy of the order of 5 per cent would be needed for noticeable competitiveness gains to be realised. For this reason, the failure to observe such falls during the course of 2009 is a concern. Given the radical steps taken with respect to public sector wages, it might be that a demonstration effect will be seen in wage setting in 2010. Our forecasts include an expectation of wage falls of 2½ per cent in 2010 (including the public sector wage cuts). A failure for this to materialise could significantly weaken recovery prospects.

The fourth area in which positive developments are needed is the banking sector. Without a healthy banking system with both capital and a willingness to lend, recovery will be difficult to achieve, if not impossible. As we have argued before, the creation of NAMA may contribute to returning Ireland's banking system to good health, although the full implications for the taxpayer remain unclear. However, there remains uncertainty over the capital needs of the banks post-NAMA and whether these needs will be met by private sources. The discussion above on the flow of funds in the economy and the positive impacts on the banks of private sector deleveraging add some hope to the overall picture but concerns remain.

As a final note, we think it is worth drawing attention to the value in having a broad political consensus behind the overall budgetary target of €4 billion in savings for Budget 2010. Discussions of the origins of the Celtic Tiger sometimes point to the Tallaght Strategy³⁶ as being one of the factors which gave rise to the years of growth after the late 1980s. While no such strategy is explicitly in place right now on the part of the opposition parties, the consensus around the macro target appears to be facilitating appropriate fiscal management.

³⁵ Bergin, A. T. Conefrey, J. Fitz Gerald and I Kearney, 2009. *Recovery Scenarios for Ireland*. ESRI Research Series No. 7, Dublin: Economic and Social Research Institute.

³⁶ This refers to the commitment by the then Fine Gael leader and Leader of the Opposition Alan Dukes not to oppose the government when appropriate fiscal action was being taken.

JUNIOR CYCLE EDUCATION: INSIGHTS FROM A LONGITUDINAL STUDY OF STUDENTS

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There is considerable debate at the moment about the nature of junior cycle education in Ireland. Much information relevant to this debate has been obtained from a study which tracked the progress of students through second-level education. This on-going longitudinal study yields many significant insights into the processes shaping student experiences of the educational system. A cohort of 900 students in 12 case-study schools has been surveyed and interviewed since their entry to first year. The schools included in the study were selected to capture key dimensions of variation in school organisation, namely, the approach to subject choice, the approach to ability grouping, and the kinds of personal and social support structures put in place for students. This study, the first of its kind in Ireland, provides significant insights into the processes shaping student experiences and outcomes. Three books** have been published to date presenting findings on junior cycle experiences.

The Transition to Second-level Education

Moving into second-level education evokes contradictory emotions among students; they are excited about going to a new school but nervous about what lies ahead of them. The primary and second-level sectors are distinctive in their organisation and structure, requiring students to adapt to a very different setting on making the transition. Students in first year have several teachers rather than one, and, in many cases, are moving to a larger school with a longer school day. Their relations with their teachers and peers are also different; having more teachers often means a more formal relationship with school staff and many students are required to build new friendship networks.

Moving from primary to second-level schooling means encountering a new curriculum. Students take more subjects, typically 13-14, in first year than they had in primary school and are exposed to new knowledge domains. Students are generally positive about the new subjects they take in junior cycle, particularly subjects with a more practical basis, such as Art, Materials Technology (Wood) and Physical Education. However, where they study the same subjects as in primary school (Irish, English and Maths, for example), many students report discontinuity in the standard taught or in the teaching approach used.

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Schools handle the transition process in different ways. Almost all schools have an open day prior to students arriving and/or an induction day to familiarise first year students with the rules and practices of the new school. In the majority of cases, a class tutor has responsibility for an incoming class and helps students to adjust to the new school setting. Around half of all second-level schools have student mentors, where older students take responsibility for looking after a small group of first year students.

In spite of facing a very different school setting, most students adapt quickly to their new school. However, a minority of students – about one in six – take longer to settle in. To some extent, this process reflects the background characteristics of students – girls report taking longer to settle in than boys, newcomer (immigrant) and Traveller students take longer to adapt, and students who were already disaffected by their primary experiences have greater adjustment difficulties. However, the way in which the transition process is managed by the school significantly affects the ease of transition. Students settle in if they have more realistic expectations about what second-level school will be like; this can be facilitated through formal visits to the school beforehand or informally through information provided by siblings and friends. Formal student integration programmes help students to settle in, but only if they are underpinned by a positive school climate, that is, by positive interaction between teachers and students, and among students themselves. Many students express reluctance to approach teachers about personal problems such as bullying; student mentors, therefore, provide a way of addressing student problems and are generally seen favourably by first year students. Continuity in curriculum also facilitates student integration into the new school as does access to subjects with a more practical orientation.

Second Year Experiences

The junior cycle is a three-year programme which is formally assessed largely on the basis of written exams at the end of third year. After the settling-in period of first year, second year is often characterised by teachers as one of ‘drift’ on the part of students. Without the focus of an examination, they are seen as becoming more disengaged and ‘difficult’ than previously. However, our research indicates that second year is actually a key period in students’ longer-term engagement with schooling. First year involves a certain degree of turbulence for all students as they adjust to the new school setting. By second year, however, two distinct groups of students are evident. The first group is more highly engaged in schoolwork, they find schoolwork challenging but invest more time in homework and study than they did in first year. This group is disproportionately made up of female students, those from middle-class (professional) backgrounds, and those in mixed ability or higher stream base classes. In contrast, the second group of students is drifting or even actively disengaging from schoolwork and is investing less time in homework/study than previously. This group is disproportionately made up of male students, those from working-class backgrounds and those allocated to lower stream classes. This differentiation has a longer term impact on student achievement in third year.

Third Year Experiences

The presence of the Junior Certificate examination is found to set the tone for student experiences in a number of ways: the teaching methods used, the amount of work assigned to students and teacher expectations, the use of private tuition ('grinds'), and student perceptions of school climate. Students in the study were asked about the kinds of teaching approaches which they felt facilitated their learning. Third year students generally prefer techniques that allow them to have more autonomy in the learning process whereas a strictly teacher-led approach is considered less helpful. Students highlight the importance of interaction in class whereby everybody can contribute and discussions are encouraged. However, both students and teachers report that third year represents a move away from 'fun' activities (such as group work, quizzes and projects), a 'need to knuckle down to the books', and a greater emphasis on monitoring student behaviour in class.

The majority of students report increased demands in terms of schoolwork and homework in third year compared with earlier years. In particular, students' time investment in homework and study increases significantly between second and third year. Many students have spoken of increasing 'pressure' in third year and of difficulties in juggling the demands of homework and revision. In some cases, especially among some groups of girls, this pressure is seen as a significant source of stress. In an effort to assist them with their studies, a significant minority (a quarter) of third year students take private tuition ('grinds') outside school.

In tandem with the changes in teaching and learning, interaction between teachers and students appears to change in nature over the course of junior cycle, with positive interaction in the form of praise or positive feedback becoming less prevalent and negative interaction in the form of being reprimanded by teachers becoming increasingly prevalent. There is an overall decline in the extent to which students are positive about school and their teachers as they move through junior cycle, reflecting, at least in part, the changing school climate.

Each Junior Certificate subject can be taken at one of three levels: higher, ordinary and (for English, Irish and Maths) foundation. Six of the twelve case-study schools used streaming, allocating students to their base classes according to their assessed ability in first year. Streaming practices are found to have a significant impact on student experiences. Students allocated to lower stream classes are much more likely to disengage from school, and many report feeling insufficiently challenged by schoolwork. In streamed schools, the subject level taken is generally linked to the base class attended, with lower stream classes usually allocated to ordinary or foundation levels. As a result, students in lower stream classes take an average of one subject at higher level compared with almost six for those in higher stream classes and almost seven for those in mixed ability base classes. In schools with mixed ability base classes, choice of subject level is usually the result of a negotiation process between teacher and student, although the way this process operates varies across schools and teachers. Overall, the case-study schools vary markedly in the take-up of higher level subjects, even controlling for students' initial academic ability; this reflects differences in school policy (for example, regarding the use of streaming) but also the interaction between teacher and student expectations. The choice of subject levels is important because of its consequences for achievement in the Junior Certificate examination as well as for access to higher level subjects at senior cycle.

The study provides important evidence on the factors which influence student performance in the Junior Certificate examination. Students come to second-level education with very different performance levels in reading and maths. As might be expected, reading and maths test scores at the beginning of first year are strongly predictive of exam performance three years later. However, there is significant variation across schools in student academic outcomes, controlling for initial performance. Thus, school and classroom process can make a crucial difference to how students fare academically.

Ability grouping is strongly predictive of examination performance, with students in lower stream classes achieving 2.5 grade points (out of a maximum of 10) per subject less than students of similar ability levels attending mixed ability base classes. This reflects the ceiling on achievement set by the lack of access to higher level subjects among lower stream students. More crucially, it is also indicative of lower teacher and student expectations within lower stream classes.

Aspects of school climate are found to have a crucial impact on academic outcomes. Some students, especially working-class boys, get caught up in a cycle of 'acting up' and 'being given out to' by teachers, especially from second year onwards. Students appear to become disaffected if they feel that the rules of the school, and their treatment by teachers, are unfair or arbitrary. Even more academically engaged students feel little sense of ownership over the school rules as currently formulated. Student misbehaviour and negative teacher-student interaction are associated with significantly lower Junior Certificate examination grades.

Second year experiences emerge as crucial in other respects. Many students take time to come to terms with the demands of schoolwork after making the transition to second-level education; however, students who still report having difficulties with schoolwork in second year tend to underperform subsequently. Given the nature of the Junior Certificate examination, it is not surprising that time spent on homework and study in third year pays off in terms of examination results. Longer term engagement has an additional impact, however, since students who were drifting or disengaging in second year receive lower examination grades. Life outside school also influences academic outcomes since students who work part-time during term-time and those who have a very active social life tend to achieve lower examination grades than other students, all else being equal.

The research team is continuing to analyse findings from the longitudinal study to explore the transition to senior cycle and the prelude to the Leaving Certificate examination. Junior cycle experiences are found to influence the types of opportunities and pathways open to students at senior cycle, which are in turn likely to influence examination outcomes and post-school pathways. Emerging findings highlight the crucial role of experiences at junior cycle for young people's later engagement with learning.

Findings from the longitudinal study raise a number of issues for policy development regarding junior cycle education. It is evident that the presence of the Junior Certificate exam influences the nature of teaching and learning, especially in third year, with the focus narrowing to one of preparation for the exam. This finding is very much in keeping with research on high stakes testing internationally, since both students and teachers will respond to the presence of such tests. The use of different forms of assessment might have the potential to change the focus of teaching and learning to one which better facilitates student engagement. However, it is clear that assessment is not the only issue. In spite of a relatively centralised second-level system in Ireland, schools have a certain degree of discretion over key aspects of organisation and process. The findings indicate that schools can make a positive difference to student engagement and performance in a number of ways – by adopting a more flexible approach to ability grouping and promoting the take-up of higher level subjects, by using diverse teaching methods to actively engage students in learning, by focusing on positive behaviour rather than negative sanction in responding to pupil misbehaviour, and by promoting a positive climate with good relations between teachers and students. The study highlights the importance of supporting schools to better facilitate student engagement in learning.

** This study has been funded by the National Council for Curriculum and Assessment, and the Department of Education and Science. Findings have been published in:

SMYTH, E., S. MCCOY, M. DARMODY, 2004. [*Moving Up*](#), Dublin: Liffey Press and ESRI.

SMYTH, E., A. DUNNE, S. MCCOY, M. DARMODY, 2006. [*Pathways through the Junior Cycle*](#), Dublin: Liffey Press and ESRI.

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INVESTING IN ELECTRICITY INFRASTRUCTURE AND RENEWABLES IN IRELAND[†]

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Like other countries, Ireland is trying to decrease greenhouse gas emissions while keeping electricity prices low. One of the main ways to reduce greenhouse gases is to switch electricity generation from fossil fuels to renewable sources, but this tends to increase electricity prices. Two features combine to make the Irish situation different:

- As a small island market, Ireland's electricity system is relatively isolated. All things equal, this tends to lead to higher costs of generation for a given security of supply standard.
- Ireland's main source of renewable energy is wind. Electricity can only be generated from wind when the wind is blowing at appropriate speeds, which in Ireland happens on average about a third of the time. Because wind power is intermittent, other sources of generation must be ready to step in and meet demand.

Two recent papers** provide insights into how best to plan for Ireland's future electricity needs. They show how better links to the British grid are necessary to allow more effective use of clean wind power and to partly overcome the problems posed by its intermittent availability. They also analyse the constraints on expanding wind energy. Diffney, Fitz Gerald, Lyons and Malaguzzi Valeri (2009) evaluate the costs and benefits of increasing wind generation on the all-island electricity market that started in November 2007. Historically, there has been wide variation in the price of oil and the price of natural gas, which in 2008 fuelled about 60 per cent of Ireland's electricity generation. The study takes this volatility into account and considers three different scenarios on fuel prices, focusing on the year 2020. The authors also consider the effects of different levels of interconnection between the electricity systems of Ireland and Great Britain. At the moment there is only one electricity interconnector that runs between Scotland and Northern Ireland, but a second – between Ireland and Wales – is planned for completion by 2012.

The study finds that for a small and relatively isolated market such as Ireland, a high penetration of wind is economically sound only if it is accompanied by an increase in interconnection to Great Britain. In the absence of greater interconnection some of the available wind generation

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will necessarily have to be left idle to maintain the reliability of the system. Not surprisingly, for low fuel prices the lowest system costs are achieved when wind penetration is low (2000 megawatts in this study), whereas for high fuel prices high levels of wind generation are optimal (6000 megawatts in this study). If wind reaches 6000 megawatts by 2020, Ireland is likely to achieve the government's target of producing 40 per cent of electricity from renewables by that date. The impact of wind generation on electricity prices means that wind power is likely to provide a hedge against the consequences of high fuel prices.

The level of investment needed in the electricity sector in the near future is extremely large when one considers the joint effect of building more wind-farms and the need to extend and upgrade transmission and distribution lines. Transmission and distribution need to be upgraded because many lines are ageing and more lines are needed to accommodate the increase in wind generation and the complementary investment in new interconnection. This highlights the need to keep capital costs down. Maintaining regulatory certainty is vital in the all-island market since it will allow banks to assess the risks more easily and, therefore, result in lower financing costs.

The high level of future investment in transmission and distribution suggests that it is also important to keep maintenance costs low. In most developed economies employees working in the utilities sectors (water, natural gas and electricity) earn more than manufacturing workers. However, in the Republic of Ireland the ratio of utility worker's pay to manufacturing worker's pay is significantly larger than in other European countries. If labour costs in Ireland remain high, the cost of updating transmission and distribution networks may be greater than necessary. There has, however, been a shift towards subcontracting maintenance work through competitive bidding, putting downward pressure on costs, and this trend should be encouraged.

The study highlights the importance of putting in place the right amount of electricity interconnection to Great Britain and of ensuring that its operation and governance are efficient. If the interconnector does not work efficiently the benefits of increased wind on the system will be smaller. Malaguzzi Valeri (2009) in another recent study shows that most of the gains from interconnection between Ireland and Great Britain derive from the difference in electricity generating portfolios in Ireland and Great Britain. Great Britain relies more on coal-fuelled and nuclear generation whereas Ireland relies more on generation fuelled by natural gas. Malaguzzi Valeri (2009) shows that there are decreasing returns to investment in interconnection, both for society as a whole and for interconnector investors in particular. Returns decrease particularly quickly for independent interconnector owners, in part because they are unable to capture all the positive externalities from interconnection, such as increased returns to generators or lower greenhouse gas emissions in electricity generation. Increased interconnection also lowers the cost of electricity reserves (not measured directly in this study), which further widens the gap between interconnector returns and the returns to society. Privately owned interconnectors are, therefore, likely to invest less than would be socially optimal, which suggests that there is a role for public investment in interconnection.

**DIFFNEY, S., J. FITZ GERALD, S. LYONS and L. MALAGUZZI VALERI, 2009. Investment in Electricity Infrastructure in a Small Isolated Market: the Case of Ireland, *Oxford Review of Economic Policy*, Vol. 25, No. 3, pp. 469-487. available at:
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COPING WITH POPULATION CHANGE IN IRELAND: THE IMPLICATIONS FOR HEALTHCARE

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Health and health care are particularly sensitive to the size and make-up of the population. As in most other affluent nations, life expectancy in Ireland has been increasing strongly in recent decades. This is to be celebrated and attests to real improvements in Irish society. Nonetheless, older people require both more health care, on average, than younger people and a different combination of services. Population ageing is not the only demographic challenge we face however. Relatively high numbers of births and recent inward migration have led to a larger population, and in combination with increased life expectancy, will lead to further increases in population in the future. This will exert increasing pressure on Irish health care resources. Effective planning for the consequences of these trends will be crucial in determining how successful we are in coping with the associated challenges.

A report** analysing the impact of changes in the size and composition of the population change on health needs and the healthcare system was published recently. The analysis was undertaken by a consortium of researchers from the ESRI and Trinity College Dublin and supported by the Health Research Board and Health Service Executive. The report showed that there will be significant population growth and ageing between 2009 and 2021. The central demographic projection estimates that the population will grow overall from 4.24 million in 2006 to between 4.71 million and 5.1 million by 2021 depending on migration developments. The age composition of the population will change with the proportion aged under 5 years projected to fall absolutely (by 32,000) and relatively (by 1.2 per cent). Those aged 65+ will increase from 11 per cent to 15.4 per cent of the population, with those aged 85+ increasing from 1.1 per cent to 2.1 per cent which represents an absolute increase of 42,900 individuals. The fall in the proportion of younger age groups will be most pronounced in Western and Southern counties.

Based upon current utilisation patterns these demographic changes would imply:

- 5,214 more inpatient beds and 1,022 more day beds in Irish hospitals. This is a 54 per cent increase in inpatient beds and a 64

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per cent increase in day beds between 2007 and 2020 or a total bed growth requirement of 4 per cent per annum.

- General practice consultations may increase by about one-third among those aged 16+ between 2006 and 2021 – a figure that could rise to close to half if projected changes in morbidity in the population are realised over the same period.
- Outpatient consultations may rise by about a quarter on a current use basis but integration of trends from the period from 2001 to 2006 would see the proportionate increase in consultations in 2021 rise by almost 60 per cent over 2006. Worsening epidemiological trends would increase this requirement still further.
- Projections of prescribing to 2021 estimate that total ingredient costs will escalate to €1.5 billion on a current use basis and €2.4 billion if past trends from 1995-2006 prevail from €1.06 billion in 2006. These are increases of 42 per cent and 126 per cent.
- Our preferred projection of demand for residential long-term care for people aged 65 years and over in 2021 is 35,200 places or 35,820 including current unmet need. This suggests a requirement for an additional 13,324 long-term care places or 59 per cent. This is 888 places per annum from 2007-2021 for people aged 65 years and over assuming an unchanged acute care system.

The increased demand for health care likely to stem from demographic and epidemiological change in the Irish population is significant. Even if national finances improve substantially, the current way in which care is delivered will be unsustainable within any reasonable budget given the nature of demographic change. This demands a reconfiguration and intensification in the use of health care resources and improvements in levels of efficiency. Changes in the manner in which current resources are used and a reorganisation of services will moderate the extent of investment in services required:

- A full implementation of the 2001 Primary Care Strategy would make better use of existing primary care resources and moderate the impact of population ageing and GP ageing and feminisation. Similarly, more and better use could be made of other medical professionals, such as practice nurses and pharmacists.
- However, even with restructuring the number of GPs being trained in Ireland will need to increase to keep pace with demographic developments. Implementing government policy of training 150 GPs a year would make a substantial difference but should healthcare policy focus on increasing use of primary care this number would need to increase further.
- Analysis shows that a substantial proportion of resources in Irish outpatient care are expended on monitoring and maintaining chronic health conditions that could be just as successfully managed and much more cheaply managed in primary care.

- The HSE's preferred health system strategy is premised upon the reduction of average inpatient length of stay in Irish hospitals through the greater use of day case and particularly day surgery. Although the varying complexity of the case load across hospitals can lead to differences in day case rates, the current variability would suggest that there is substantial potential to increase day rates across the Irish hospital system and in doing so significantly increase the level of efficiency.
- Average length of stay is also influenced by patient characteristics and older age and chronic illness in particular. Analysis suggests that the lack of step down services has a critical influence in reducing the efficiency of acute hospitals in Ireland, particularly voluntary hospitals whose patient load tends to be older and more likely to have disabling conditions.
- The inter-dependency of health care sectors underlines the need to think about reform on a system-wide basis. A transition to a healthcare system focused more on care in the community than acute public hospitals will require development of both primary and long-stay services, as well as social care services, if it is to be practicable and not lead to a severe degradation in the level and quality of service.

**LAYTE, R. (ed.) *Projecting the Impact of Demographic Change on the Demand for and Delivery of Healthcare in Ireland*, ESRI Research Series No. 13, Dublin: Economic and Social Research Institute.

THE IRISH ‘HEALTH BASKET’: AN INTERNATIONAL PERSPECTIVE

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Introduction

A recent paper** used what is termed the ‘health basket’ approach to compare publicly funded health care benefits in Ireland with those in other countries. The health basket describes which individuals (“breadth”), are covered by public funding, to what extent (“height”), and for which health care services (“depth”). While many international comparisons focus on the depth dimension, this paper focuses on the proportion of the population covered by publicly funded health benefits (breadth of cover) and the proportion of the cost covered by the public funding (height of the cover). The structure of the Irish health basket is compared with a sample of other countries frequently used as comparators (Australia, Canada, France, the UK and Sweden) and several distinctive features of the Irish system emerge.

The Irish Health Basket

The range of health services directly funded by the public sector in Ireland is similar to that found in other countries: inpatient and outpatient services; general practitioner (GP) services; drugs; medical appliances; home nursing; home help services; dental, ophthalmic and aural services; rehabilitation services etc. The breadth dimension of the Irish health basket can be split into two categories based on medical card status. Individuals in Category I are issued with a medical card (approximately 30 per cent of the population) on the basis of a means test (although a small number are issued on a discretionary basis). There are two types of medical card. The full medical card grants access to free primary and secondary public health care. The GP Visit Card grants access to free GP visits only. Category II refers to the non medical card group and covers the rest of the population (approximately 70 per cent).

Breadth and height of publicly funded health care vary from one service to another. The focus here is on GP and hospital care. Public funding for GP care is almost fully restricted to Category I individuals (including those with a GP Visit Card). GP care (in-hours and out-of-hours consultations, home visits) is provided free of charge to the eligible individuals and thus height of public cover is 100 per cent. For Category II individuals, GP care is not included in the benefit basket. The full-price charge imposed on this group is complicated by uncertainty around the pricing level. Private charges for GP visits are approximately €40-€60. The charges vary by GP, but can also vary by visit and can be hard to predict in advance.

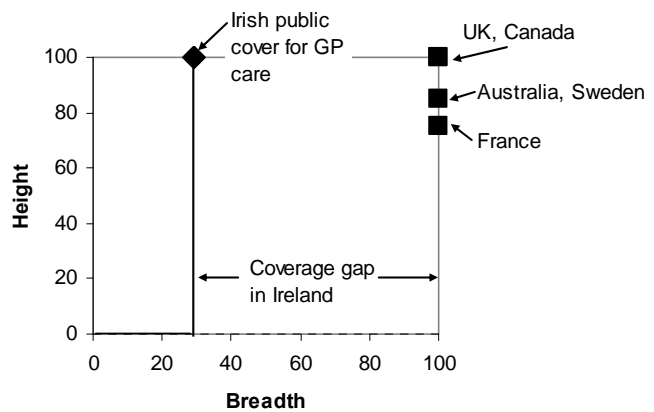
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International Comparisons

Individuals in both categories (universal breadth) are entitled to public hospital care (inpatient and outpatient care including day case and emergency department care). The height of public funding is 100 per cent for Category I individuals (excluding GP Visit card holders), (i.e. free access to public hospital care). Category II individuals (with some exceptions) are required to pay statutory charges (i.e. height of public cover <100 per cent).

Figure 1 illustrates the position of six countries, including Ireland, along the dimensions of breadth and height for GP care. The breadth of public cover for GP care in Ireland is narrow relative to the other countries.³⁷ More than 70 per cent of the population pay the full price of GP care (i.e. technically excluded from the health basket). In each of the other countries, breadth of public cover for GP care extends to the whole population. The height of public cover is 100 per cent in Ireland, as in the UK and Canada. The minimum height of cover in Australia, Sweden and France is estimated to be >75 per cent although many people are eligible for a higher level of cover.

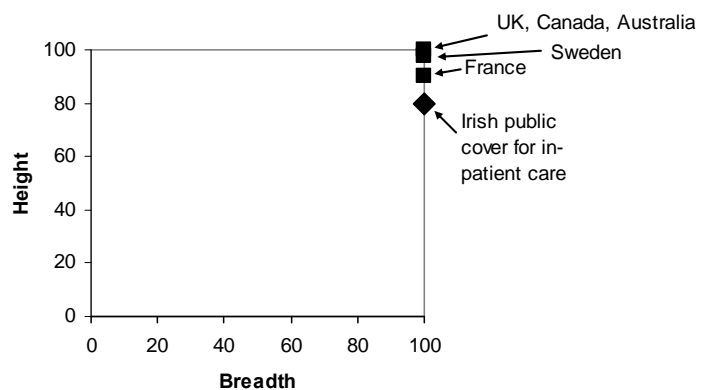
Figure 1: Height and Breadth Dimensions of Health Baskets for GP Care (% Coverage)



Public cover of secondary care in Ireland is broader than in primary care. Public funding for public inpatient care is available for all individuals (universal breadth) in the six countries (Figure 2). Care is provided free of charge in the UK, Canada and Australia (100 per cent height). The minimum estimated height of cover is >90 per cent in Sweden and France and approximately >80 per cent in Ireland, increasing to 100 per cent for eligible individuals.

³⁷ This conclusion would remain valid even if the analysis were extended to take into account tax relief on expenditures such as GP fees.

Figure 2: Height and Breadth Dimensions of Health Baskets for Public Hospital Inpatient Care (% Coverage)



The health basket provides a useful framework for describing and examining the main features of a health care system. Cross-country comparisons of health baskets have focused on variations in depth and the content of detailed benefit catalogues. The above analysis illustrates how the basket framework is also useful for comparing across countries in terms of who is eligible to receive what public services (i.e. breadth), and at what price (i.e. height). The response of the Irish health care system to questions of how a health service should be financed, who should have access to it, and at what price, has been described as complex. Until now, there has been less attention paid to unpicking and documenting the nature of that complexity and the health basket facilitates this process.

While the breadth and depth of public cover is relatively consistent across hospital and GP care in a sample of countries including Australia, Canada, France, Sweden and the UK, this is not observed in the Irish structure. Breadth of public cover for GP care is lower than in the comparison countries. The limited breadth of public cover for GP care has important policy implications in light of the observation that primary care is the appropriate setting to meet 90-95 per cent of all health and personal social service needs, and policy commitments that primary care is to become the central focus of the health system.

It is also important to remember that the way in which health care systems function in practice can diverge from their intended structures. The focus here is on examining the structure of the Irish health basket as outlined in legislation and policy. Practical implementation of the basket of health care services introduces other complications (e.g. supply side factors, tax reliefs etc.) that further complicate the breadth and height of cover, and distinguish the Irish system from other countries. International comparisons of health baskets need to take into account this divergence between intention and implementation.

**SMITH, S., 2009. "The Irish 'health basket': a basket case?", *European Journal of Health Economics*, online edition, DOI 10.1007/s10198-009-0171-4 <http://www.springerlink.com/content/j47t070m6w733p0q/?p=c10392a3dab44be7a7af419c16fba30d&pi=14>

IDENTIFICATION OF INDIVIDUALS AT RISK OF BECOMING LONG-TERM UNEMPLOYED

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Introduction

Unemployment has risen sharply during the current recession – from 4.5 per cent at the end of 2007 to 12.5 per cent in November 2009, with forecasts for 2010 in the region of 15 per cent. When unemployment last reached these levels, long-term unemployment also rose sharply. Preventing long-term unemployment is important from both economic and social perspectives, especially because long-term unemployment tends to lead to erosion of skills and self-confidence, and damages future employment prospects. Effective prevention depends on being able to identify those at risk of becoming long-term unemployed at an early stage, and referring them to appropriate labour market programmes to improve their chances of obtaining employment. This was the motivation for a recently published ESRI report³⁸ which developed a statistical profiling model for Ireland that would identify those individuals with a high risk of becoming long-term unemployed.

What is Statistical Profiling?

Over the last decade or so, a growing number of public employment services around the world have begun to develop statistical profiling systems to identify and target their scarce re-employment resources at those jobseekers in greatest need. Statistical profiling is a tool whereby a numerical probability score, calculated on the basis of multivariate regression, determines the referral of an unemployed person to further employment services. Specifically, the score derived ranks each individual in terms of his/her risk of becoming long-term unemployed. Public employment service staff can then use this score to identify those who are most in need of their assistance to help prevent them becoming long-term unemployed. Overall, the main objective in using statistical profiling is to deliver intensive services early rather than after long-term unemployment has already occurred. It is important to note that a profiling system can only be successful in preventing those identified as being at risk of becoming long-term unemployed from falling into this trap if it is combined with delivery of targeted training and employment programmes

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³⁸ O'Connell, P.J., S. McGuinness, S., E. Kelly and J. Walsh, 2009. *National Profiling of the Unemployed in Ireland*. ESRI Research Series No. 10, Dublin: Economic and Social Research Institute.

that are known to be effective in enhancing the employment prospects of their participants.

In relation to Ireland, the central objective in developing a profiling model is to provide the Department of Social and Family Affairs (DSFA) with a framework that will enable them to estimate an individual's likelihood of remaining on the Live Register after twelve months. The DSFA can then use the measure that is produced by the profiling model to both identify jobseekers that require immediate re-employment services and refer them for programmes designed to enhance their chances of securing employment. This type of intervention system would be in stark contrast to that currently operated under the National Employment Action Plan (NEAP) whereby all individuals are referred by the DSFA to FÁS, the national employment and training agency, for assistance after a three-month unemployment spell.

Main Findings

The data used in the study came from the Live Register database and from a specially designed survey administered to all individuals in the Republic of Ireland that claimed unemployment benefit over a thirteen week period between September and December 2006. The information gathered in the survey related to a number of factors that are believed to influence subsequent employment prospects. This included information on an individual's educational attainment, literacy and numeracy proficiency, previous employment and unemployment history, health status, location, etc. The DSFA administered the survey and also tracked the subsequent status of profiled claimants over a fifteen month period. A total of 60,189 individuals made claims for unemployment benefit between September and December 2006. After the elimination of duplicates, unsuccessful claimants and individuals failing to complete the survey questionnaire, the final sample used in the study consisted of 33,754 claimants.

The statistical profiling models of long-term unemployment that were estimated from these data, for males and females separately, were found to be very well specified and, therefore, provide very accurate predictions of an individual's likelihood of entry to long-term unemployment. The accuracy of the models were found to increase substantially at higher levels of long-term unemployment risk. Very few countries implementing statistical profiling release details of their models. However, comparison with Denmark was possible, and the Irish model was found to provide more accurate predictions of entry to long-term unemployment than its Danish equivalent.

A number of individual attributes were found to be strongly associated with long-term unemployment risk. Specifically, the results for the male model indicate that the probability of remaining on the Live Register is associated with a recent history of long-term unemployment, previous participation on the Community Employment (CE) scheme, advanced age, number of children, relatively low education, literacy/numeracy problems, location in urban areas, lack of personal transport, low rates of recent labour market engagement, spousal earnings and geographic location. The results from the female model are broadly similar to those of males: the probability of remaining on the Live Register increases with number of children, literacy/numeracy difficulties, a history of unemployment and casual employment status. Success in finding a job, on the other hand, rises with third-level education, recent employment, a willingness to move for a

job and good health. However, some gender differences are apparent. In particular, females who are married or separated are less likely to leave the Live Register, as are those whose spouse is a high earner. The magnitude of the impact of children on labour market entry is also higher for females. Regarding location, unlike males, females appear to derive no disadvantage from living in an urban location. While many of the identified risk factors seem intuitive, the value of profiling is that it allows us to distinguish the importance of each and to put a weight on every factor's role in determining the risk of long-term unemployment.

**Profiling in
the
Recession**

Economic conditions, and consequently labour market conditions as well, have changed radically since the data used in the ESRI study were collected. However, this is unlikely to undermine the accuracy and predictive power of the profiling model as the principal factors that determine long-term unemployment risk – low levels of education, history of long-term unemployment, literacy/numeracy problems, etc. – do not vary with business cycle conditions. Furthermore, the dramatic increase in unemployment that has taken place since the economic downturn began in 2008 has generated enormous pressure on the capacity of all components of the public employment service, particularly the DSFA and FÁS. A profiling system, if implemented, would allow the rank ordering of those claiming unemployment benefits in terms of their relative risk of entry to long-term unemployment. This would then provide policymakers with a fair and rigorous basis on which to ration interventions and target them on those most at risk of long-term unemployment.



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